

On exam day, are law students & bar takers better off recalling 21% of what they studied, or 92%?



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We know that traditional methods of studying do not serve students very well. One landmark study found that when people cram, they remember less than half of the information only an hour later.¹ At 24 hours, they recall less than 34% and, at a week, it's down to 25%. At a month, it's 21%. In contrast, by using SeRiouS (short for "Spaced Repetition Systems"), users remember a projected **92%** of material – and not just for a few days – but for as long as they use it. It's also not nearly as time consuming as cramming, so students learn far more in far less time.

The scientific research has repeatedly proven spaced repetition's effectiveness. One Harvard study found medical students preparing for licensure exams remembered nearly three times as much using spaced repetition over those that did not.² Our algorithm improves upon the algorithm in that study, so that when compared against the typical forgetting curve retention at one month, 21%, our users remember nearly four times as much (92%).³ A separate meta-analysis summarizing over fifty twentieth century studies of spaced repetition showed that users improved testing results by at least half a standard deviation by use of spaced repetition.⁴ These results have begun to draw attention in the mainstream, and spaced repetition has been touted by the New York Times, Harvard Business Review, Time Magazine and others.

SeRiouS works on any device with a web connection: iPhone, Droid, PC or Mac. Users can study in free moments at home, the library, or anywhere in between.

How Does the Science Work?

SeRiouS users don't need to understand the science for it to work, but knowing just a bit makes users appreciate the power behind it. At its most basic, SeRiouS is a set of electronic flashcards. SeRiouS begins by asking users to study an electronic version of the humble flashcard. But, behind that electronic flashcard, is an algorithm based on a century of research. We know that whenever a person learns new information, they immediately begin to forget it. The rate of "memory decay" varies from person to person, but predicting when a person will forget can be determined with the right information. Scientists call this predictable forgetfulness "the forgetting curve."

¹ HERMANN EBBINGHAUS, MEMORY: A CONTRIBUTION TO EXPERIMENTAL PSYCHOLOGY 76 (Henry A. Ruger & Clara E. Bussenius trans., Teacher's College, Columbia University, 1913)(1885); A translation of Ebbinghaus is in facsimile at <http://catalog.hathitrust.org/Record/000360875>

² B. Price Kerfoot et al., *Online "Spaced Education Progress-Testing" of Students to Confront Two Upcoming Challenges to Medical Schools*, 86 ACAD. MED. 300, 300 (2011).

³ P.A.Wozniak, *Optimization of Learning* (available <http://www.supermemo.com/english/ol/sm2.htm>).

⁴ John J. Donovan & David J. Radosevich, *A Meta-Analytic Review of the Distribution of Practice Effect*. 84(5) J. APPL. PSYCHOL. 795, 795-802 (1999).

For every flashcard SeRiouS users review, they are prompted to report how well they knew the answer after flipping it over. If they knew it well, they won't see the card again for a longer time; if they struggled to remember, they'll be shown it again sooner. Based on these answers, SeRiouS's algorithm customizes itself to a user's personal forgetting curve, and then uses that information to prompt studying at just the right time.

As users learn with SeRiouS, another well-studied scientific principle kicks in: the spacing effect. The spacing effect says that, as long as people review information at the right time, they forget more slowly (and, therefore, need to review less often). After a few viewings, review is needed *much* less frequently. For example, to memorize a new concept for the long-term, one might have to review it after a day, but then not again for 3 days, and after that, not for seven days, and after that, not for 30 days, and after that, not for 90 days, and so on. The result is that a little bit of work to review concepts after learning them in class will mean that there is very little studying that's actually needed at exam time. It's all been banked in memory.

How It Serves Law Students at Each Point of their Education

Users can choose to create their own content, or use content created by law professors for them.

With the Create-and-Share option, users can create cards (or draw cards from the crowdsourced library) to go along with their state specific essay topics. Users also have the ability to create additional content on their own, with their study group, or as a course project. Users can keep the cards they have made private, share them with select peers, or contribute them to SeRiouS's crowdsourced flashcard library, which has thousands of law school and bar exam flashcards indexed by school/topic/professor.

Users can also – but need not – purchase “premium” content. The “Boost Deck,” for example, can help users at all phases of legal education. Boost Deck users receive 600+ electronic flashcards corresponding to the most commonly tested Multistate Bar Exam/first-year course topics. Each card was created and vetted by law professors. For first-year law students studying for contracts or property, using SeRiouS will leave them with an advantage on their course-specific exams, and also when studying for the bar years later because the MBE has such a huge overlap with the first year material. That means when others are re-learning the bar-tested information, SeRiouS users will just be doing rare reviews of concepts they know by heart. Upper level and graduating students, of course, can focus on using SeRiouS for the MBE.

Examples of Recent User Feedback

“SeRiouS was the most valuable tool in my bar preparation. I actually wrote a letter to my law school administration recommending that they purchase subscriptions to it for all law students.”

“Of all the study aids provided, none were as valuable as SRS.”

“Thank you for creating SeRiouS! The program was very effective and it helped me pass the July 2014 California Bar Exam on my first attempt.”

“I did very well on the bar exam as a result of SRS - I scored a 311 or 312, which will probably be in or close to the top ten percent of bar performers in my state...”

Pricing

Create-and-Share access is \$5/month. The Boost Deck is \$99/year.

Contact

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