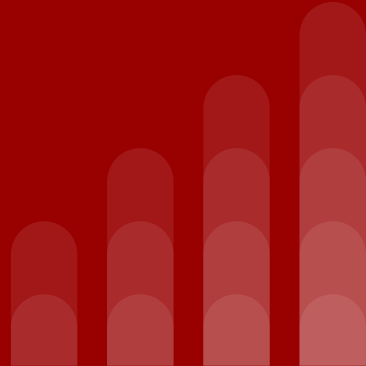
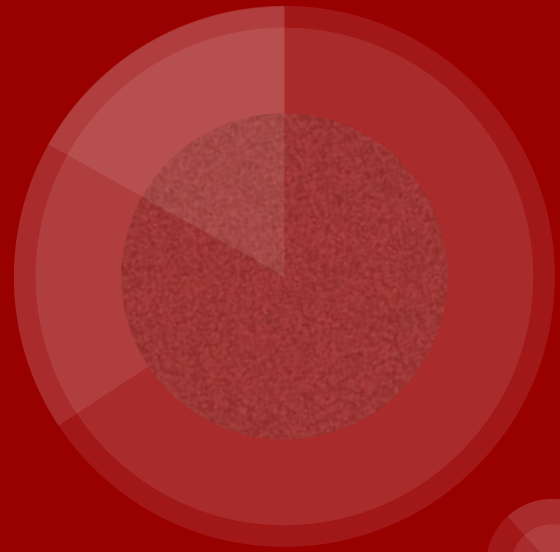


# Is there an app for that?

*Eli Edwards,  
Emerging Technologies Research Librarian  
Santa Clara University School of Law*



**A caveat: This presentation is more about questions than answers.**





## Why me and why this topic?

I'm interested in how students learn, generally, and how lawyers learn, specifically.



## One of my motivations for this:

I took the California Bar Exam  
**3** times. And the Washington  
State Bar Exam once.

(Sticking a pin in that until  
the end)





Sadly, I am not alone ...

LAW SCHOOLS

## **With Second-Worst Pass Rate In More Than 30 Years, Almost Everyone Fails California Bar Exam**

The overall pass rate was just 31.4 percent.

By STACI ZARETSKY

---

May 20, 2019 at 11:42 AM



Slight exaggeration - the headline, that is. Just the headline.

<b>School Type</b>	<b>First-Timers</b>	<b>Repeaters</b>
California ABA	45%	38%
Out-of-State ABA	48%	30%
California Accredited (but not ABA)	21%	13%
Unaccredited: Fixed-Facility	0%	8%
Unaccredited: Correspondence	29%	22%
Unaccredited Distance Learning	28%	10%
All Others	42%	22%
All Applicants	41%	28%



California Bar statistics on Winter 2019 test results, courtesy of Above the Law  
(May 20, 2019)



## **My goal? (Among many others)**

### **Help students find out how they learn best**

“One of the gaps or problems in the educational system is that no one ever helps a student figure out how to learn, and yet that's the primary challenge a student is faced with. You've got to assist them with how to do that. And that's where I think we're failing somewhat.” - Mark McDaniels, Professor of Psychological & Brain Sciences, Washington University in St. Louis

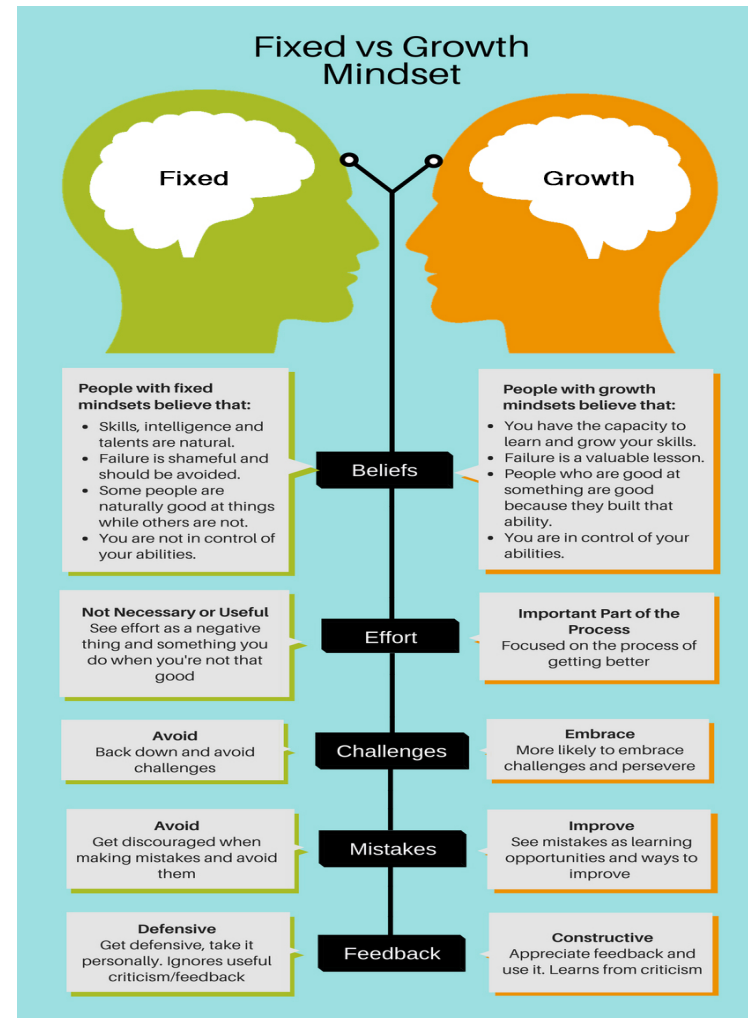


# What works (that we know about)





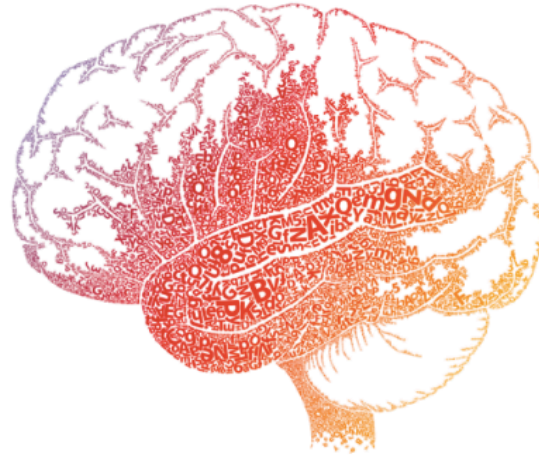
# The Growth Mindset



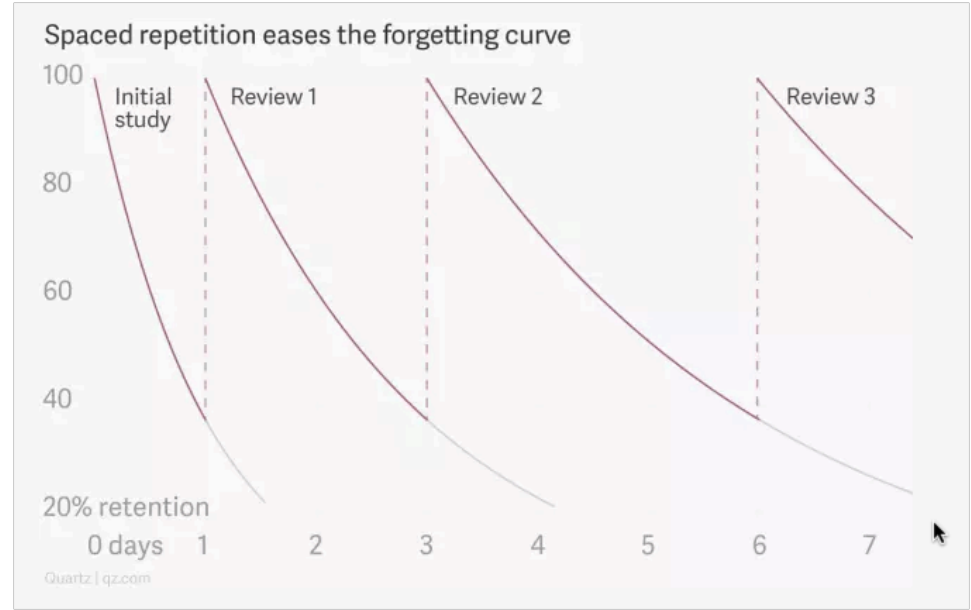
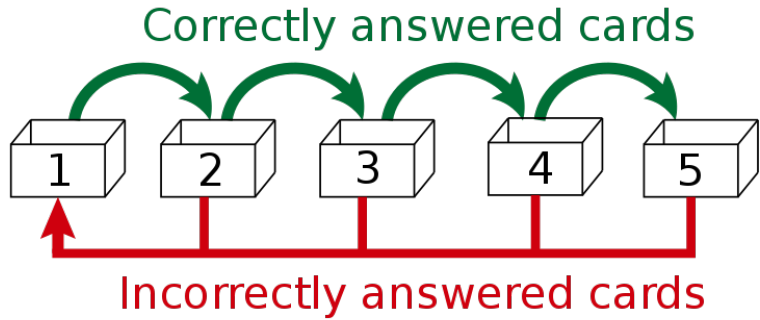
MINDSHIFT

# Studying With Quizzes Helps Make Sure the Material Sticks

By MindShift Oct 16, 2014



Retrieval practice: (NOT just endlessly reviewing outlines but actually quizzing and testing what you know)

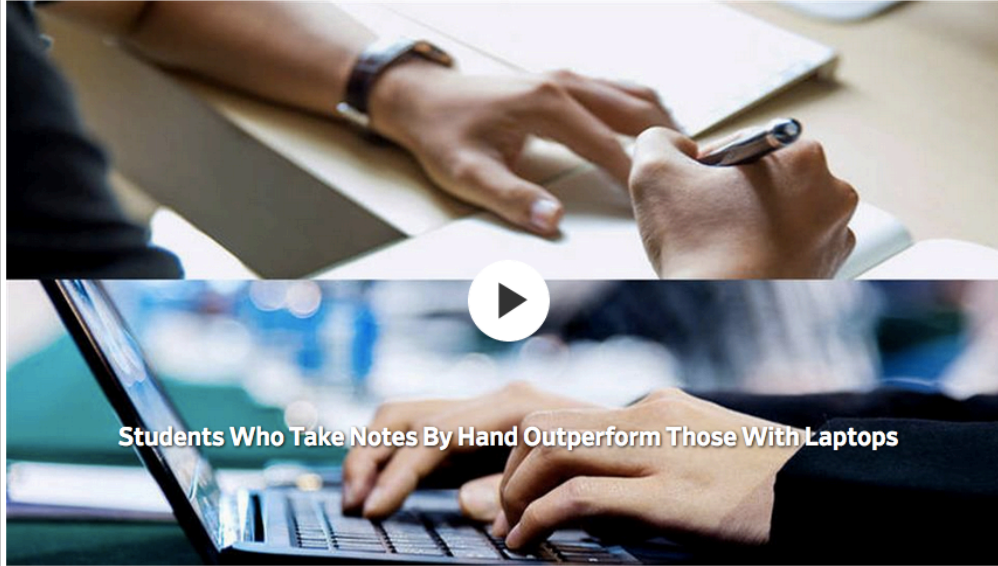


Spaced repetition (or, the Leitner method of reviewing flashcards)

HEALTH | HEALTH & WELLNESS

## Can Handwriting Make You Smarter?

Students who take notes by hand outperform students who type, and more type these days, new studies show



Most F

1. T  
T  
S  
P

2. V  
a  
A

3. T  
B  
R  
It

4. W  
R

5. N  
It  
E  
T  
S

Handwriting notes rather than typing/transcription (my students don't like hearing this)



## Step 1

Write the name of the concept at the top of a blank piece of paper.

## Step 2

Write down an explanation of the concept on the page. Use plain English. Pretend you are teaching it to someone else (e.g a new student). This should highlight what you understand, but more importantly pinpoint what you don't quite know.

## Step 3

Review what you have pinpointed you don't know. Go back to the source material, re-read, and re-learn it. Repeat Step 2.

## Step 4

If you are using overly wordy or confusing language (or simply paraphrasing the source material) try again so you filter the content. Simplify your language, and where possible use simple analogy.



The Feynman Technique (although finding a child may be the hardest part)



# Now, a violent segue into gamification

**“‘Gamification’ is an informal umbrella term for the use of video game elements in non-gaming systems to improve user experience (UX) and user engagement.” -**

Deterding, S. Dixon, D. Khaled, R., Nacke, L. Gamification: Toward a definition. CHI 2011 gamification workshop (2011) at [http://gamification-research.org/wp-content/uploads/2011/04/CHI\\_2011\\_Gamification\\_Workshop.pdf](http://gamification-research.org/wp-content/uploads/2011/04/CHI_2011_Gamification_Workshop.pdf)



# ODDLY ... there is a LOT of scholarly material about tech & legal ed

SSRN

Brow

You searched: technology legal education

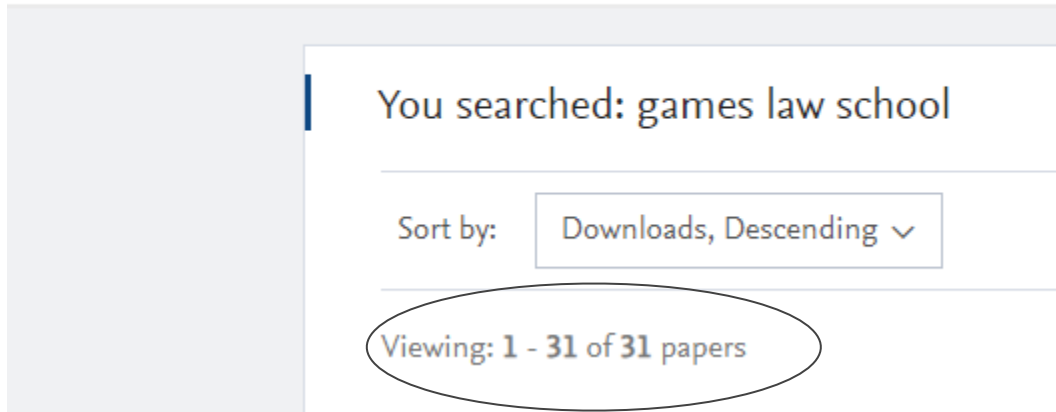
Sort by: Downloads, Descending ▾

Viewing: 1 - 50 of 387 papers



## ... but almost nothing about gamification in legal ed

SSRN



You searched: games law school

Sort by: Downloads, Descending ▾

Viewing: 1 - 31 of 31 papers

Mostly false positives, so the real result was single digits



From Professor Stephanie Kimbro, Stanford Law School:

“Gamification occurs when you take a process, such as shopping for a product or entering data into a website, and add game elements, such as progress bars, badges, rewards, or recognition, to that process to motivate the user to complete the tasks in a more desired way. Gamification strategies have been used in businesses with differing levels of sophistication for issues including customer relationship management, training, market research, business intelligence, and education.”

Kimbro, Stephanie L., Increasing Online Engagement between the Public and the Legal Profession with Gamification (March 25, 2015). Available at SSRN: <https://ssrn.com/abstract=2586150> or <http://dx.doi.org/10.2139/ssrn.2586150>



# Why games?

- They're pervasive
- They use models and simulations that are based on reality
- They're engaging
- They are proven to make a positive impact on cognition and behavior.
- They yield a lot of data about users/players
- They provide a safe environment.

Jackson, Dan and Davis, Martha F., *Gaming a System: Using Digital Games to Guide Self-Represented Litigants* (2016). Northeastern University School of Law Research Paper No. 252-2016. Available at SSRN: <https://ssrn.com/abstract=2719926>

# Existing gamification in the legal academy

Earn Rewards while you improve your research skills.

## What is the LexisNexis® Rewards Program?

You'll earn LexisNexis® Rewards points for research and training. Redeem them for an Amazon.com Gift Card,\* or thousands of items in the Rewards store. Look for our Rewards tab on Facebook to learn more: [facebook.com/LexisNexis4LawStudents](https://facebook.com/LexisNexis4LawStudents)

## Your first 400 Rewards points.

You've earned your first **400** points – worth a \$5 Starbucks Card, \$5 Amazon.com® Gift Card or a donation to charity – just by registering your LexisNexis ID. Redeem your points easily by clicking [My Rewards](#) at: [lexisnexis.com/lawschool](https://lexisnexis.com/lawschool).

## Don't need anything? Be a giver!

If you came to law school to make a difference, LexisNexis Rewards gives you a great opportunity. Donate your points to the charity you choose. Just go to [Donate Now](#) after clicking [My Rewards](#) on the Law School Home Page, [lexisnexis.com/lawschool](https://lexisnexis.com/lawschool).

amazon.com.

\$5 for 344 points  
\$10 for 665 points\*



Starbucks \$5  
Card

400 points



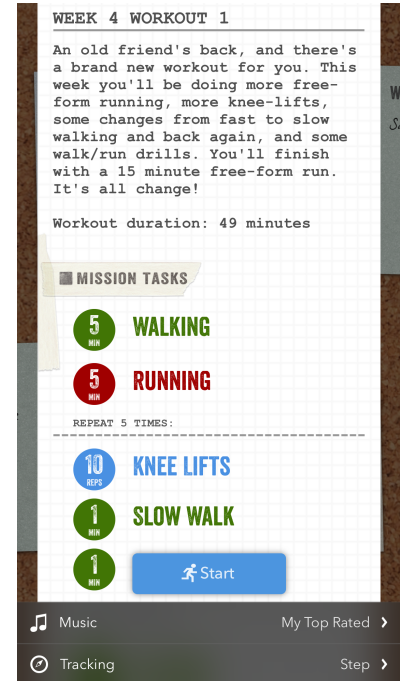
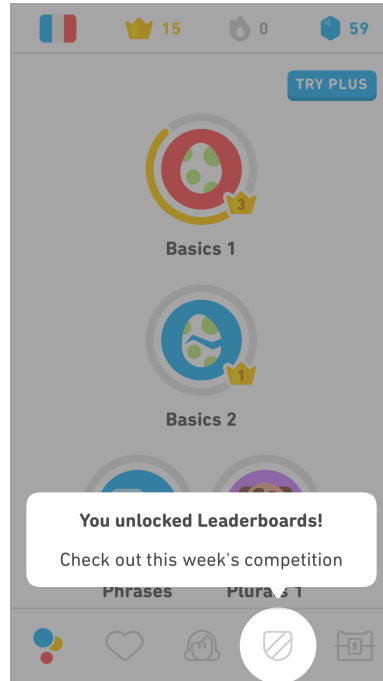
# My own bias: Gen X casual gamer with lots of gamer friends

How some acquaintances of mine legitimately lost weight and started getting active: playing Dance Dance Revolution on their PlayStations





# How I started learning French & how to jog:





## Gaming downsides from some colleagues:

- ★ “Unfortunately, many equate gamification with points, badges, and leaderboards (or PBLs)-the lowest forms of gamification. PBLs can be hugely demotivating if you're not scoring in the top five.” Debbie Ginsberg & Michelle Spencer, “Real-World Legal Technology Training,” AALL Spectrum, Mar/April 2018
- ★ “A common criticism of schools is that knowledge is gathered for exchange value instead of encouraging exploration. Leaderboards and badge systems simply swap out one value (grades) for another (rank/points/prizes). Worse still, as C. Scott Rigby discusses in her article "Gamification and Motivation," studies show that rewards can have the paradoxical effect of decreasing interest in the core activity itself. The rewards pull focus from the fundamental value of the activity and stunt the development of internalized motivation.” Casandra Laskowski, “Pedagogical Lessons from Video Games,” AALL Spectrum, Mar/April 2019



## However, I think there's room for **SOME** gamification ...


“Although critics of gamification have valid concerns about the way it is frequently applied, particularly in business settings, most of these concerns can be overcome by taking the time to selectively apply gamification programs that are narrowly applied to specific goals.”

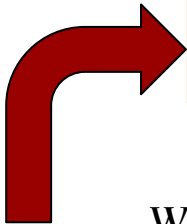
- Carli Spina, “Gamification: Is It Right for Your Library - The Rewards, Risks, and Implications of Gamification,” AALL Spectrum, April 2013



**What's out there?**

# From Transmedia:

	<p><b>The Objection! Series</b> <b>Save 25%</b> by ordering all 5 games (Below): <i>Classic Objection!</i>, <i>Civil Objection!</i>, <i>Autoneg</i>, <i>Civil Objection!</i>, <i>SlipFall</i>, <i>Expert Witness</i> and <i>SivPro!</i>, and as a bonus, you will receive TransMedia's <i>Evidence Lecture</i> in MP3 format for free (worth \$99.00).</p> <p><b>All games come on CD-ROM for Windows 7, 8, Vista and XP.</b></p>	<p><b>\$399</b></p> <p> <b>Add to your SHOPPING CART</b></p>
--	---	---



When was this last updated??



# Self-made games

## **Touro Trial**

I use a PowerPoint jeopardy type game called Touro Trial as a collaborative authentic assessment midway and three-quarters of the way through the fall semester to gauge what skills need further reinforcement and what the students have learned. Touro Trial serves to assess a student's ability to think through a problem, answer citation questions, and explain how to do research, while presenting the answer to each question in a courtroom manner. Students work in teams to answer questions of increasing difficulty presented on PowerPoint slides, and the students compete against other teams to answer the question correctly first. Questions range from "write the cite" to questions asking about how to research an area of law or how to find a case or statute. Students earn "Touro Trial dollars" for correct answers and the ultimate goal is to be the team with the most money.

Dennis, Johanna K. P., Assessing Student Learning Through Powerpoint 'Games' (February 11, 2009). Second Draft, Vol. 23, Spring 2009; Vermont Law School Research Paper No. 10-14. Available at SSRN: <https://ssrn.com/abstract=1408593>



# Not a game, definitely an app

Study Smarter with Digital Flashcards

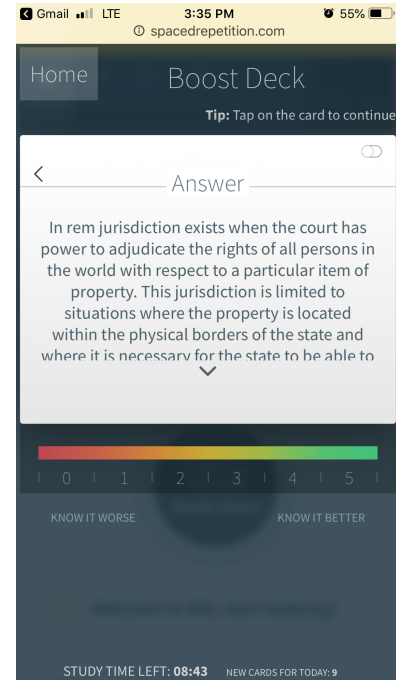
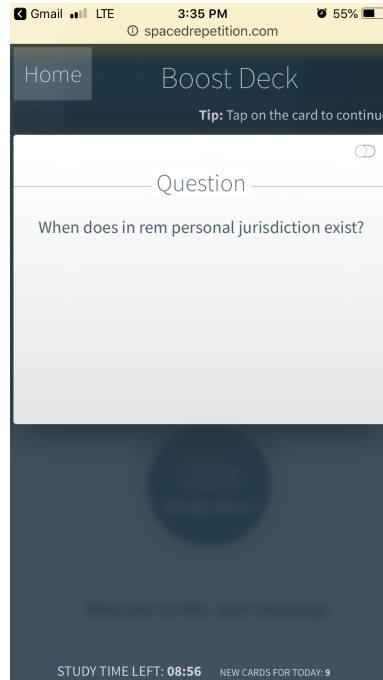
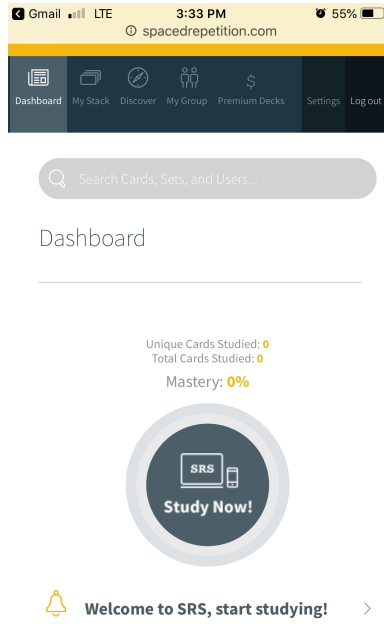


Quizlet

Price: Free / iOS & Android



# Along the lines of Quizlet, we have Spaced Repetition





Home

# Boost Deck

Tip: Tap on the card to continue

## A Tip

In rem PJ occurs with respect to actions for condemnation (eminent domain cases), forfeiture of property to the state (e.g., when the property is used for the unlawful transportation of narcotics), and settlement of decedents' estates.

Home

# Boost Deck

You've studied your 10 new cards for today. It's best to stop now. Slow and steady wins the race!

Tip: Tap on the card to continue

## Question

Is there freedom of the press to publish illegally obtained calls/information?

Search Cards, Sets, and Users...

## Dashboard

Unique Cards Studied: 12  
Total Cards Studied: 12  
Mastery: 0%



You have 0 cards to review and 0 new cards to study today.

NEED HELP? View the [Quick Start Guide!](#)

SRS: You have 10 cards to study today > Inbox x

reminders@spacedrepetition.com via sendgrid.net

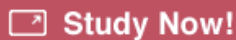
3:05 PM (19 minutes ago)

to me ▾



Come Study!

You have 10 new cards to study  
and 0 cards to review today!

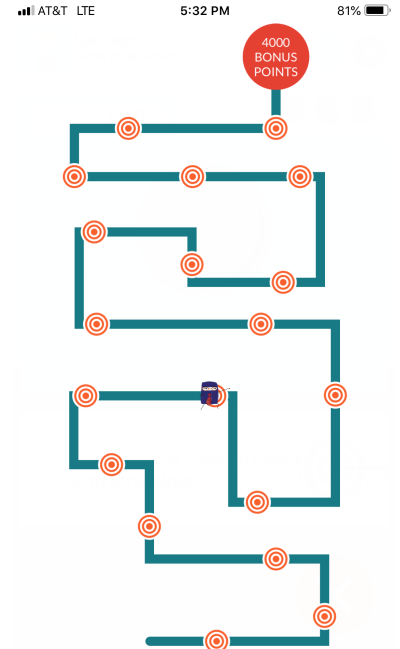
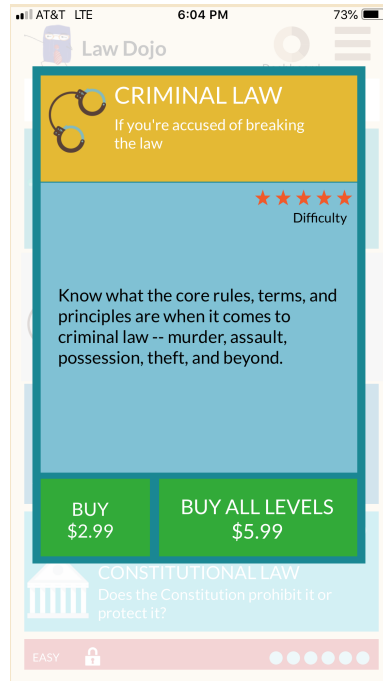
 Study Now!

Opt out of notifications.

spacedrepetition.com

# From Stanford: Law Dojo

<http://www.lawschooldojo.com/>



0000



Can the government see the phone numbers you have dialed, without getting a warrant?

No

Yes

100



+100 points.

Can the government see the phone numbers you have dialed, without getting a warrant?

No

Yes

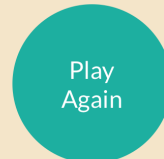
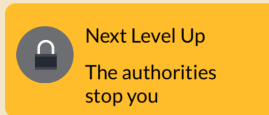
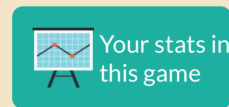


600  
Points

Right Answers

5 out of 9

You needed to score 5300 more points to beat this level.

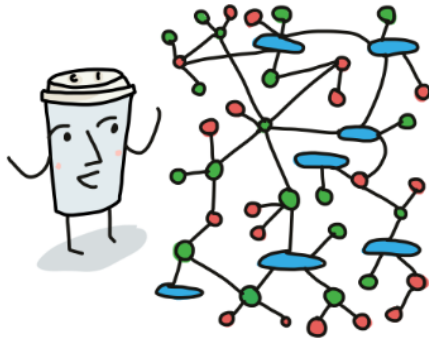


# And Learned Hands (Stanford & Suffolk Law: <https://learnedhands.law.stanford.edu/>)



## What is Learned Hands?

Learned Hands is a game in which you spot possible legal issues in real people's stories about their problems. You read the stories, and then say whether you see a certain legal issue — family law issues, consumer law issues, criminal law issues, etc.



The game is also a research project. Each time you play, you are training a machine learning model to be able to spot people's legal issues. This model will be used to develop access to justice technologies that connect people with public legal help resources. It will help us to make a Rosetta Stone for legal help — linking the legal help guides that courts and legal aid groups offer to the people who are searching for help.

Crowds of T... University of MySCU Portal - Santa Clara E Apps to B... What is "vir... My Drive - G... Automatic C... Brain Rules CALIcon19: Learned X

https://learnedhands.law.stanford.edu/app/play/s/5b5f670d8524043dd08d111b

Learned Hands Miss Eli

14/17 ?

Points: 950

I signed a 3 year lease for an apartment...

At the end of this 3rd year, I was told I had to give termination notice before January. Otherwise I am not actually terminated and my lease renews for a year.

Disappointing, but ok my bad. Months go by and I find a leasetakeover.

But NOW they're telling me I'm actually terminated and can't do a leasetakeover.

They said it was, "Due to a bug in the system"

Can I be terminated without even signing anything?

If not, am I on grounds to deny being terminated or recieve compensation for this ring around yes/no hassle they've given me?

Do you see a legal issue around **Accidents, Injuries, and Torts (Problems with Others)** in this post?

✓ ✗ →

Read the scenario (some of these taken from Reddit) and choose whether it's relevant. You get points if you match the consensus.

## Congratulations!

You spotted 7 legal issues.  
Thank you for your hard work!

### Stats for this game



15  
Labels



750  
Points



7  
Issue spotted



3 minutes, 57 seconds  
Time Spent

Play Again

### Your Overall Stats



22  
Labels



1100  
Points






























0  
Quality Score\*



#134  
Rank



Progress!

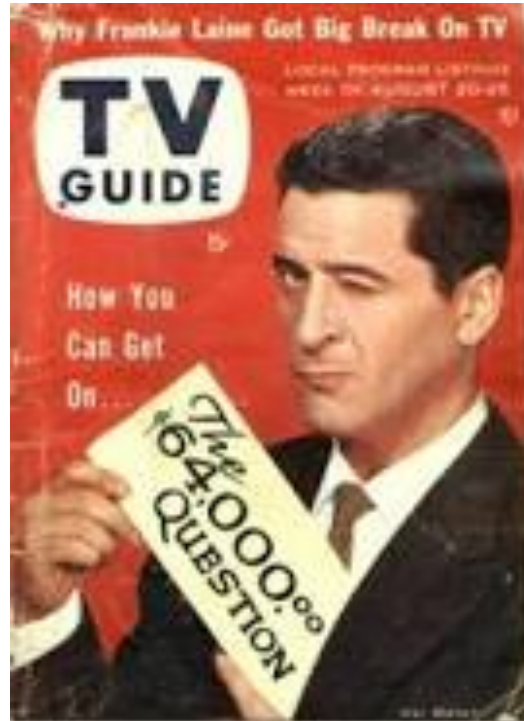
Leaderboard			This Week	This Month	This Year	All Time
	 <b>Margaret Hagan</b> Level 15	Points: 321,850 Time Spent: 2 hours, 13 minutes, 20 seconds				
	 <b>Emma</b> Level 12	Points: 200,200 Time Spent: 2 hours, 20 minutes, 45 seconds				
	 <b>Legal Eagle</b> Level 2	Points: 19,550 Time Spent: 3 hours, 12 minutes, 6 seconds				
	 <b>Diana</b> Level 1	Points: 3,000 Time Spent: 2 minutes				
	 <b>Sarah Lilly</b> Level 0	Points: 2,700 Time Spent: 1 minute, 48 seconds				
	 <b>kiwikiwi</b> Level 0	Points: 1,200 Time Spent: 12 hours, 10 minutes, 5 seconds				
	 <b>LAC</b> Level 0	Points: 1,000 Time Spent: 40 seconds				
	 <b>Miss Eli</b> Level 0	Points: 950 Time Spent: 3 minutes, 57 seconds				
	 <b>Mtn</b> Level 3	Points: 700 Time Spent: 56 seconds				



The Leaderboard: look how high I am after one bout!



How do we test what's out there versus what works?





## The Long Now goal I'd like to present at a future conference

- ★ *Qualitative and quantitative assessments of law school study products*
- ★ *Formal and informal assessments by librarians, I&L, faculty and students (especially students)*
- ★ *Guides and tools to help students figure out how they learn most effectively and which tools may be best suited for that style*



## Until then ...

- ★ *Talk with students, faculty, colleagues about:*
  - *What they are using now*
  - *What they prefer*
  - *What our growing understanding of learning and brains indicate*
- ★ *Encourage experimentation and demonstrations*
- ★ *Collect anecdotes, impressions and (maybe one day), data ...*



## Why re-open this conversation?

- ★ *To figure out what's already been said*
- ★ *To find out what's already been done and:*
  - *What should be discarded*
  - *What can be done better*
- ★ *To spread the word about what works and what types of students it works for*



*None of these products can, should or will replace outlining, practice essays and traditional review (or if we're honest, cramming). But they can be used to supplement outlining, practice essays and traditional review.*

## Attorney Licensee Profile

### Elizabeth T Edwards #270518

#### License Status: Active

Address: Santa Clara University School of Law, 500 El Camino Real, Santa Clara, CA  
95053-0001

County: Santa Clara County

Phone Number: (408) 554-6938

Fax Number: (408) 554-6938

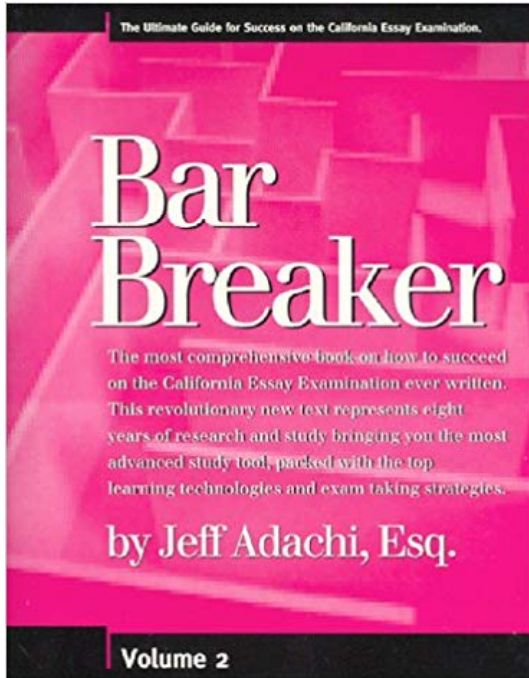
Email: [eedwards@scu.edu](mailto:eedwards@scu.edu)

Law School: Santa Clara Univ SOL; Santa Clara CA



*BTW - I did pass the bar eventually. How?*

# I cheated ... not on the actual test! But on the practice



I bought this book and its companion, opened it up ... and was paralyzed at the thought of writing an essay from scratch, even for my eyes only.

So, I peeked at the model answer. And copied it.

Next essay - I peeked again.

The next essay, I ran through the issues I spotted in my head and just copied down the model answer. Anything I missed in my head review sent me back to the flashcards and Barbri outlines.



**At the time, it felt like I was copping out and ‘cheating’.**

*But what I was really doing was reverse engineering how to write a solid bar essay. BY COMPLETE ACCIDENT.*





**In regards to my own gamification efforts:**

*Je n'ais pas parlé français*

*ou*

*Je parle un peu français*

## Goodwill Refuse to Abuse 5K at Safeco Field



### 5K Run/Walk

#### Summary

**Number of finishers:**

1,328

**Number of females:**

835

**Number of males:**

493

**Average time:**

43:08

#### Info

July 18, 2015 in Seattle, WA

event email: [5k@uscadv.org](mailto:5k@uscadv.org)

[Event Website](#)

[Question About Results?](#)

#### Races

5K Run/Walk

#### Results By



	NO	FN	LN	DIVISION	OVERALL	DIVPL	SEXPL	TIME	PACE			
<input type="checkbox"/>				841	Sandi	McCarty	F70UP	1320	7/7	830/839	1:20:59	26:08
<input type="checkbox"/>				258	Molly	Cheney	F3039	1321	189/190	831/839	1:21:01	26:08
<input type="checkbox"/>				639	Reggie	Howard	M5059	1322	71/72	491/495	1:21:07	26:10
<input type="checkbox"/>				680	Michael	Johnston	M6069	1323	41/41	492/495	1:21:11	26:11
<input type="checkbox"/>				499	Eduardo	Gomez	M5059	1324	72/72	493/495	1:25:55	27:43
<input type="checkbox"/>				501	Margarita	Gomez	F4049	1325	164/168	832/839	1:25:57	27:44
<input type="checkbox"/>				509	Jennifer	Gould	F4049	1326	165/168	833/839	1:27:55	28:22
<input type="checkbox"/>				1296	Kelly	Toomey-Marti	F4049	1327	166/168	834/839	1:27:56	28:22
<input type="checkbox"/>				410	Eli	Edwards	F4049	1328	167/168	835/839	1:38:31	31:47

Dead last!

# Other races I did after being chased by virtual zombies ...



Seattle **TURKEY TROT**



**My last thought: gaming isn't  
THE answer for ALL students,  
but if it's an answer to some  
students -- why not  
encourage it?**

**Immediate feedback &  
anecdotes (i.e., your  
turn to school me)**

