Spaced Repetition in the classroom

Nate Stemen

7 Dec 2021

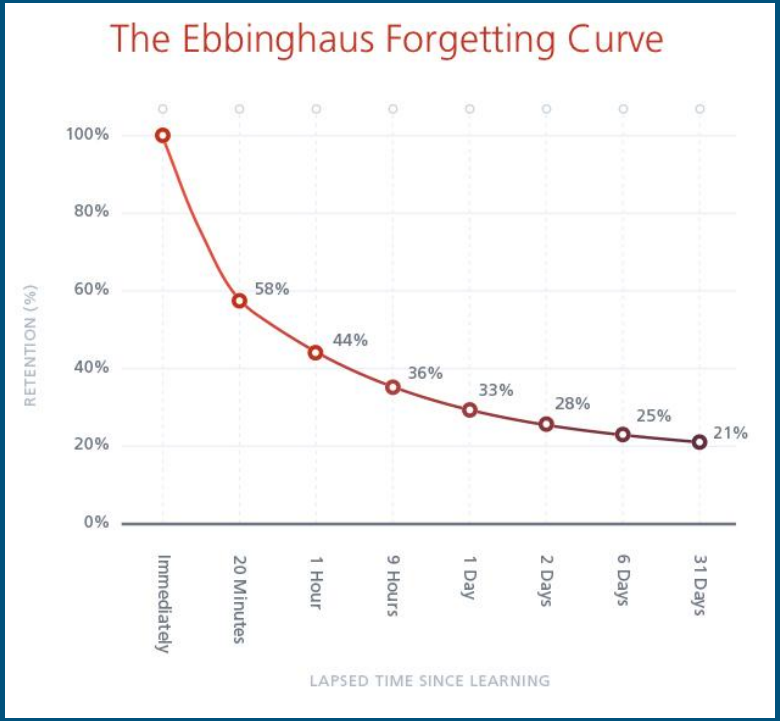
What do we know?

Please answer the following questions using the chat

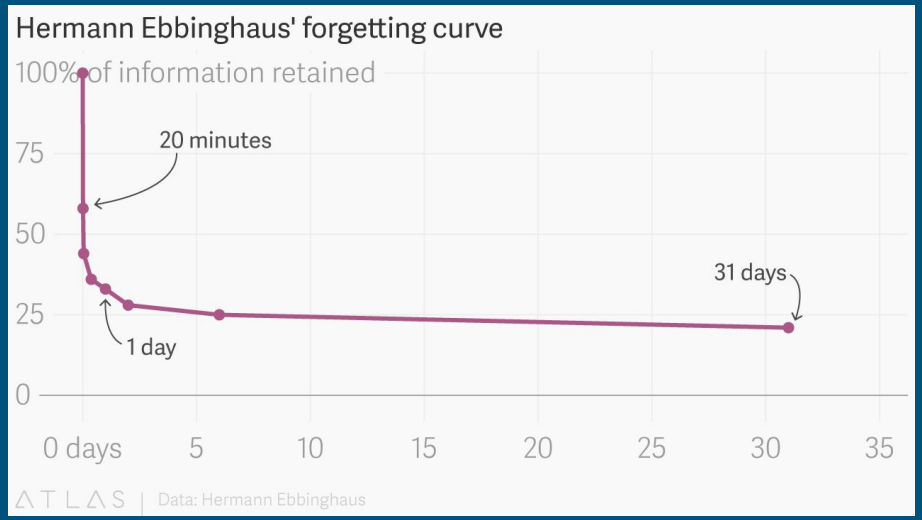
- Has anyone heard of spaced repetition before?
- Has anyone heard of/used Anki?
- Does anyone know of other methods to increase learner recall?

The Ebbinghaus Forgetting Curve

- Ebbinghaus memorized short sequences of letters (e.g. DSVT) for a given period of time and tested his ability to recall the sequences at later times.
- Showed there was an exponential fall off of his ability to recall

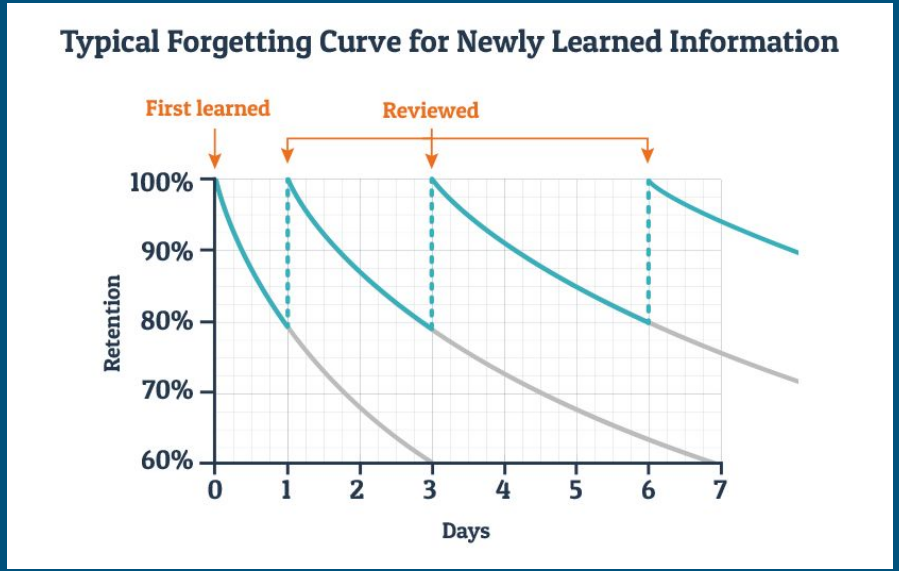


Does this model align with your experience?



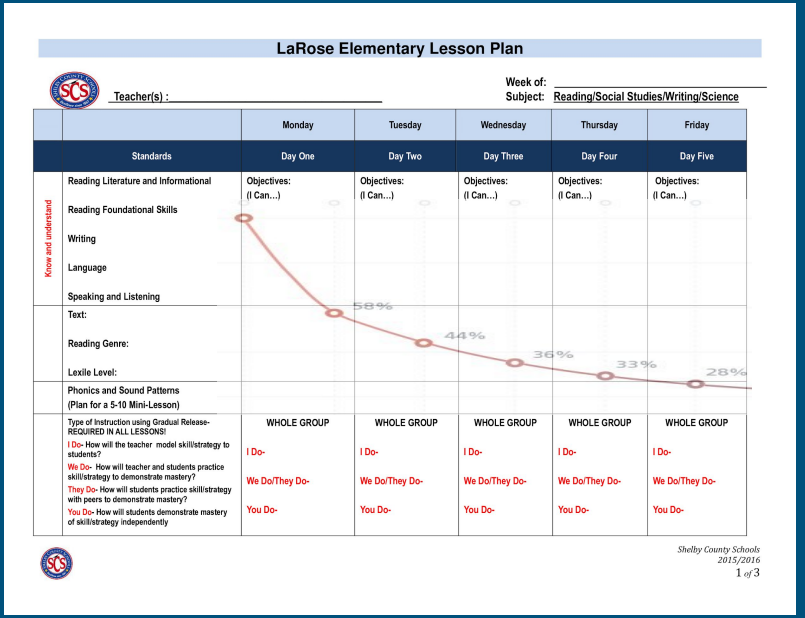
Can we avoid the effects of Ebbinghaus?

- If we **review** material in a regular/timed fashion, we can increase our ability to recall.
- Each time we do this, our forgetting curve repeats, but with a slower decrease in recall ability.



How do we use this as teachers?

- You probably already use some of this knowledge implicitly!
- Can try and review important material according to Ebbinghaus forgetting curve to help improve student recall.
- Remember, “recall” is the base of Bloom’s taxonomy of educational objectives.



LaRose Elementary Lesson Plan

Teacher(s) : _____ Week of: _____

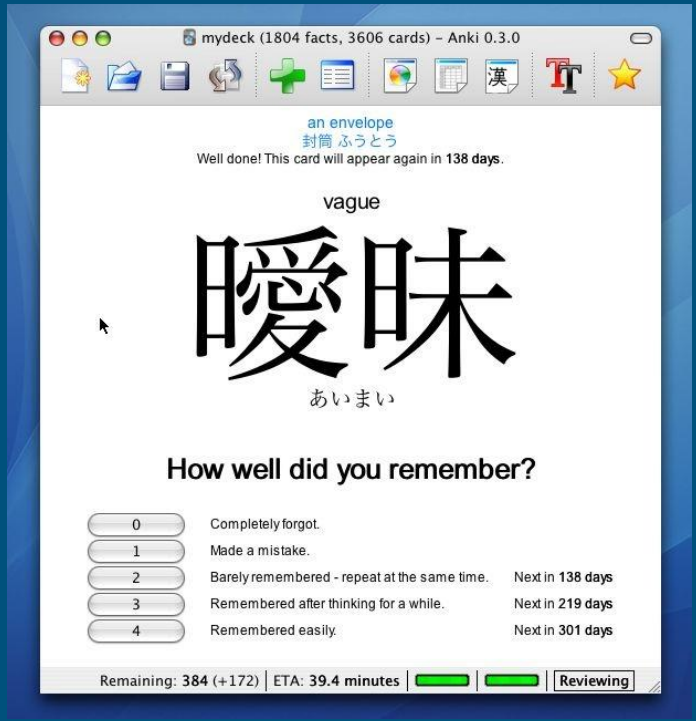
Subject: Reading/Social Studies/Writing/Science

	Standards	Monday Day One	Tuesday Day Two	Wednesday Day Three	Thursday Day Four	Friday Day Five
Know and understand	Reading Literature and Informational Reading Foundational Skills Writing Language Speaking and Listening	Objectives: (I Can…)	Objectives: (I Can…)	Objectives: (I Can…)	Objectives: (I Can…)	Objectives: (I Can…)
	Text: Reading Genre: Lexile Level:					
	Phonics and Sound Patterns (Plan for a 5-10 Mini-Lesson)					
	Type of Instruction using Gradual Release- REQUIRED IN ALL LESSONS! I Do- How will the teacher model skill/strategy to students? We Do- How will teacher and students practice skill/strategy to demonstrate mastery? They Do- How will students practice skill/strategy with peers to demonstrate mastery? You Do- How will students demonstrate mastery of skill/strategy independently	WHOLE GROUP I Do- We Do/They Do- You Do-	WHOLE GROUP I Do- We Do/They Do- You Do-	WHOLE GROUP I Do- We Do/They Do- You Do-	WHOLE GROUP I Do- We Do/They Do- You Do-	WHOLE GROUP I Do- We Do/They Do- You Do-

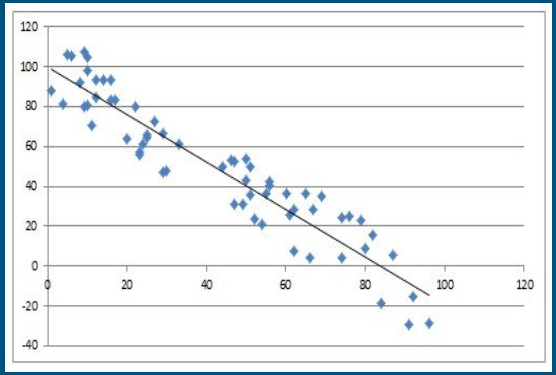
Shelby County Schools
2015/2016
1 *of* 3

Spaced repetition software (SRS)

- Anki is a popular application that automatically schedules “flashcards” so you review them at the optimal time, for long term recall.
- Make flashcard decks for students from topics/facts in class.

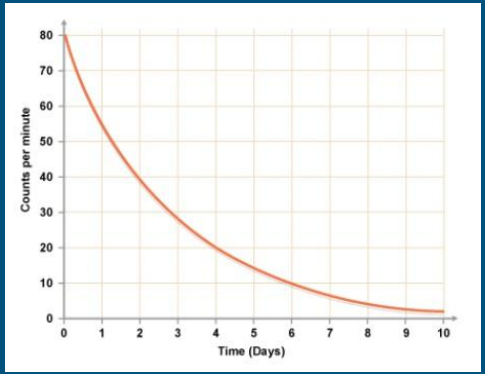


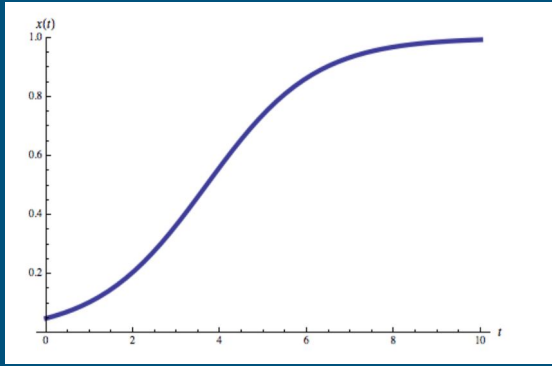
Which curve most resembles the Ebbinghaus forgetting curve?



(a)

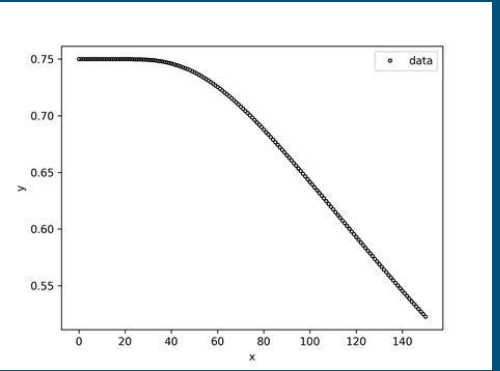
(b)





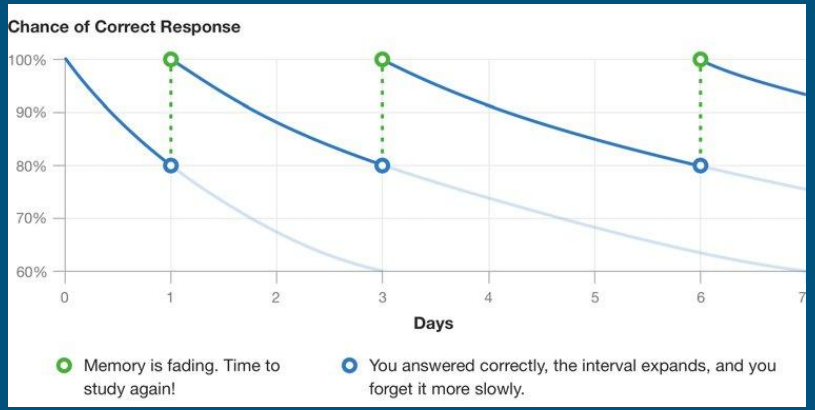
(c)

(d)



How much information has a learner forgotten 24 hours after a lecture?

(a) 50%
(b) 70%
(c) 90%

Recap

- Our ability to recall after a lecture quickly fades if nothing is done.
- Reviewing material dramatically helps us lose less information.
- Even better, reviewing according to the Ebbinghaus forgetting curves helps create long lasting recall.