

How to help people learn

slides:
[scholar.harvard.edu/
julieschell](http://scholar.harvard.edu/julieschell)

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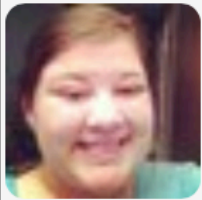


Julie Schell
Incoming Director, OnRamps & Strategic Initiatives
University of Texas at Austin, Center for Teaching and Learning

ONRAMPS
TEXAS COLLEGE READINESS

Austin, TX
July 19, 2013



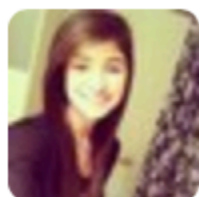


brianna girlie @bripaigegirlie

33 mins

I hate school. Ihateschool. I HATE school. I h8 school. I hate skool.
lh8skool. I. hate. school. Eye h8 skool. I HATE SCHOOL. **#ihateschool**

Expand ↩ Reply ↻ Retweet ★ Favorite ⋮ More



LundenStallings @livestrong_1

Feb 25

I was having a pretty good night, until I realized i gotta get up for prison in the morning 😊🔫 **#ihateschool**

Collapse ↩ Reply ↻ Retweet ★ Favorite ⋮ More

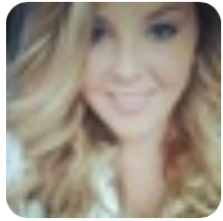
11

RETWEETS

3

FAVORITES



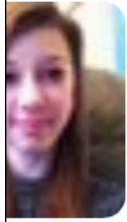


Allison Newby ♥ @allisonnewby13

Tomorrow is new fresh start to a long week of torture.

#ihateschool

Expand



Kaylee Krepps @kay_lay13

Fel

Dear pre-calc, **I hate** your stinking guts You make me vomit You're the scum between my toes Love me P.S. send that message to **physics** too



JasmineJandu @JasmineJandu

13 mins

I hate the fact that there's school tomorrow. Dead serious right now, I'd rather throw up and sit on it. **#ihateschool**

Expand

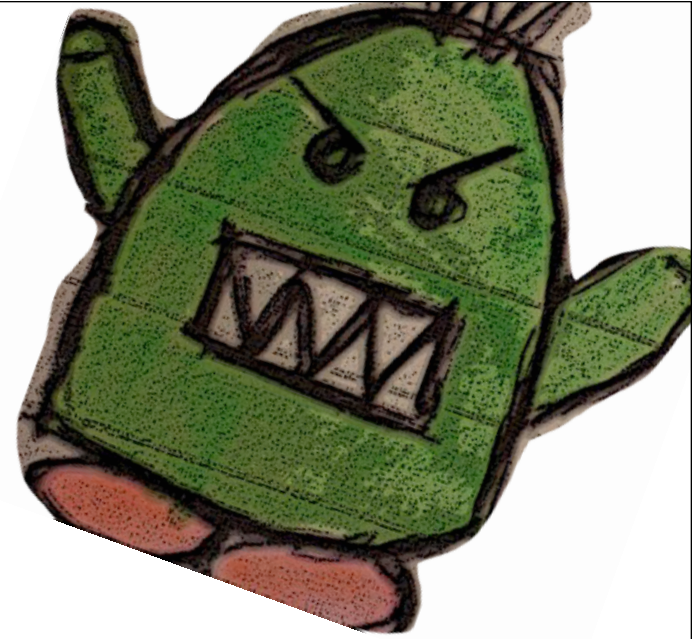


Kelly Chen @pianokchen

School is so boring #ihateschool

Expand

4h



Kelly Chen @pianokchen

School is so boring [#ihateschool](#)

Expand

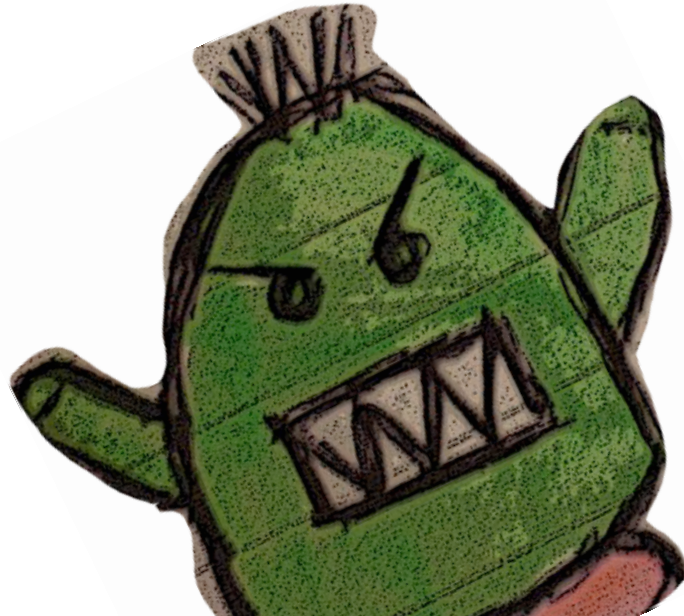
4h



brookedlane @brookedlane14

Completely. Bored. Out. Of. My. Mind. 🙄🔫 #ihateschool

Expand



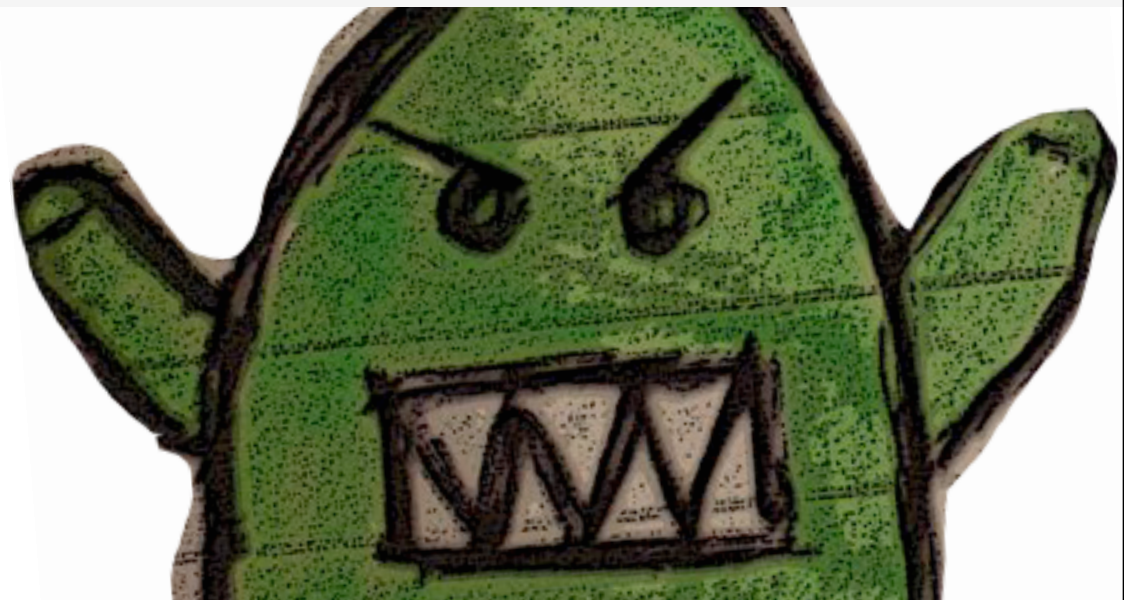


Jessie Stockstad @jessistockstad

16 Apr

Casually sitting in my room staring at the wall cause that's more fun than actually studying **#iloveschool**

Expand ← Reply ↻ Retweet ★ Favorite ... More





✨ Lexie 🌨️ ✨ @XxL_weeezyxX

17 Mar

History = there dead dude.
English = dictionary/ google.
Science = not a nerd. Don't need it.
Math= calculator.
#ihateschool #die

Expand



✨ Lexie ✨ @XxL_weeezyxX

17 Mar

History = there dead dude.

English = dictionary/ google.

Science = not a nerd. Don't need it.

Math= calculator.

#ihateschool #die

Expand



KAILS @kaillleybird

7 Apr

Never learned how to get a loan, buy a house, car, or anything else useful in life, but I DO know the effing **pythagorean** theorem

Expand

What #hashtag best describes your schooling experience?

- a. #ihateschool
- b. #iloveschool*(really)
- c. #schoolisboring
- d. #schoolisnotpractical
- e. (display back) #mixedfeelings

Q. What keeps you
up at night?

A.

Q. What keeps you
up at night?

A.

Nothing, I sleep well.

A.

Nothing.

I LOVE YOU

you

Q. What keeps
up at night?

North
Carolina

Keeping

A int

Q. What keeps you
up at night?

Q. What
up at n

A.

The number one factor that keeps me up
is the awful reality that so many kids
smart kids fall through the cracks
Texas K-12

Q. What
up at night?

Q. What keeps you

Q. What keeps you
up at night?

How can I motivate

A.

A.

How to continually challenge
students so they want to
learn more.

A.

K-12

A.

How can I motivate

Am I really getting to them?

Will they retain this?

Am I inspiring them to learn more?

K-12

Q. What keeps you up at night?

Q. What keeps you up at night?

Q. What keeps you up at night?

A.

Searching for meaningful ways
to engage students in the
learning process.

Texas K-12

How can I
better

Q. What keeps you
up at night?

keeps you
night?

Q. What
up at night?

How can I motivate myself?

A.

F

A.

Being Boring....

Oklahoma State University

Q. What keeps you up at night?

Q. What keeps you up at night?

Q. What keeps you up at night?

How can I motivate

A.

F

A.

Desinteresse!!

Brazil

Q. What keeps you

Q. What keeps you
up at night?

Q. What
up at night?

How
be
Q. What keeps you
up at night?

Q. What
up at night?

you

A.

A.

How boring I am & how little
will be retained by the student.

Yale

Students and teachers want the same thing.

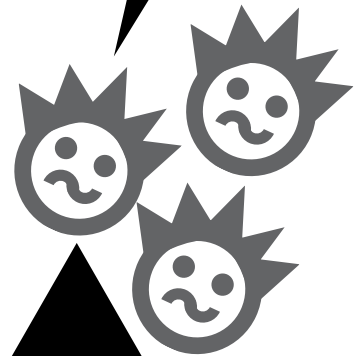
I want you
engaged.



I want you
engaged.



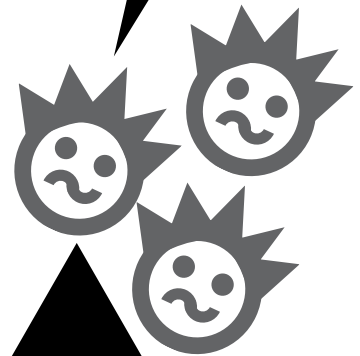
We
want to be
engaged!



I want you
engaged.



We
want to be
engaged!



Boredom

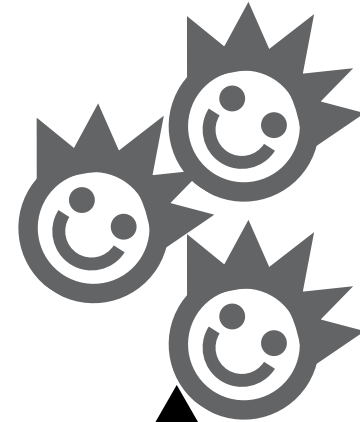
Monster



Message

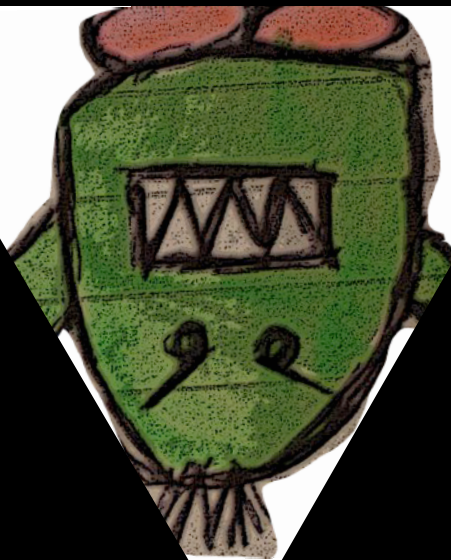


Education doesn't
have to be this
way.



ONRAMPS

TEXAS COLLEGE READINESS



 **NR**AMPS

TEXAS COLLEGE READINESS



TEXAS COLLEGE READINESS

Mission: increase the number and diversity of high school & community college students who are prepared to excel in entry-level courses at flagship and other universities.

My goals

Learn 3 tips for
helping people learn



My goals

Learn 3 tips for
helping people learn



I've been doing
this for decades but
didn't know it.



My goals

Learn 3 tips for
helping people learn



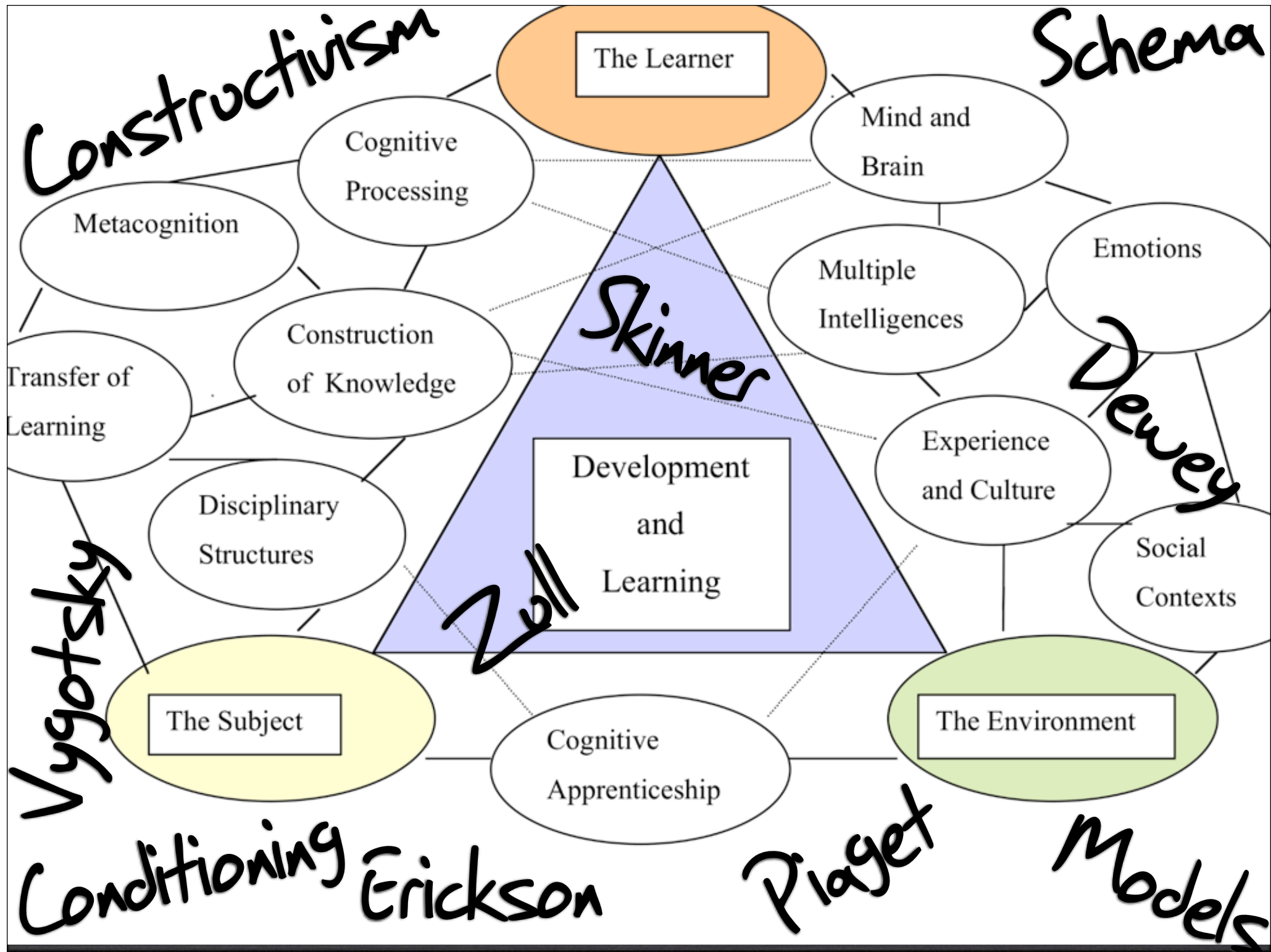
I've been doing
this for decades but
didn't know it.



I'm going to
do more and help
others.



What is learning?



Learning

Prior Knowledge x New Information

=

Changes in
Prior Knowledge

3 tips for helping people learn well

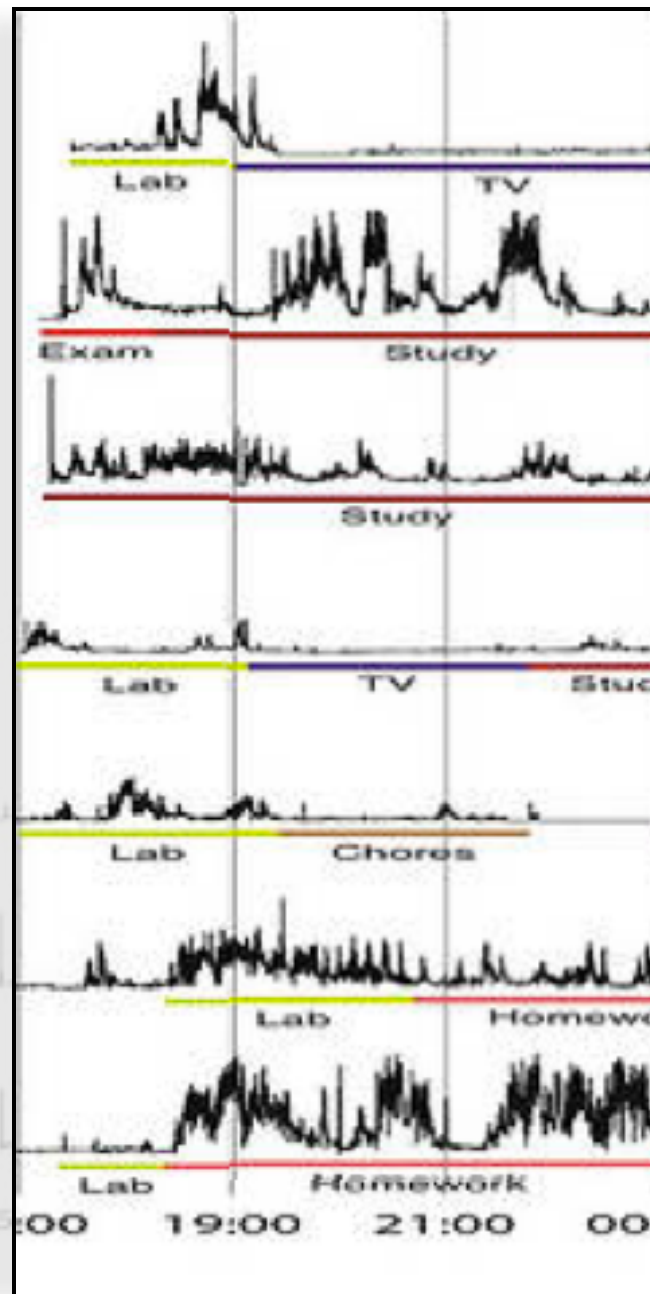


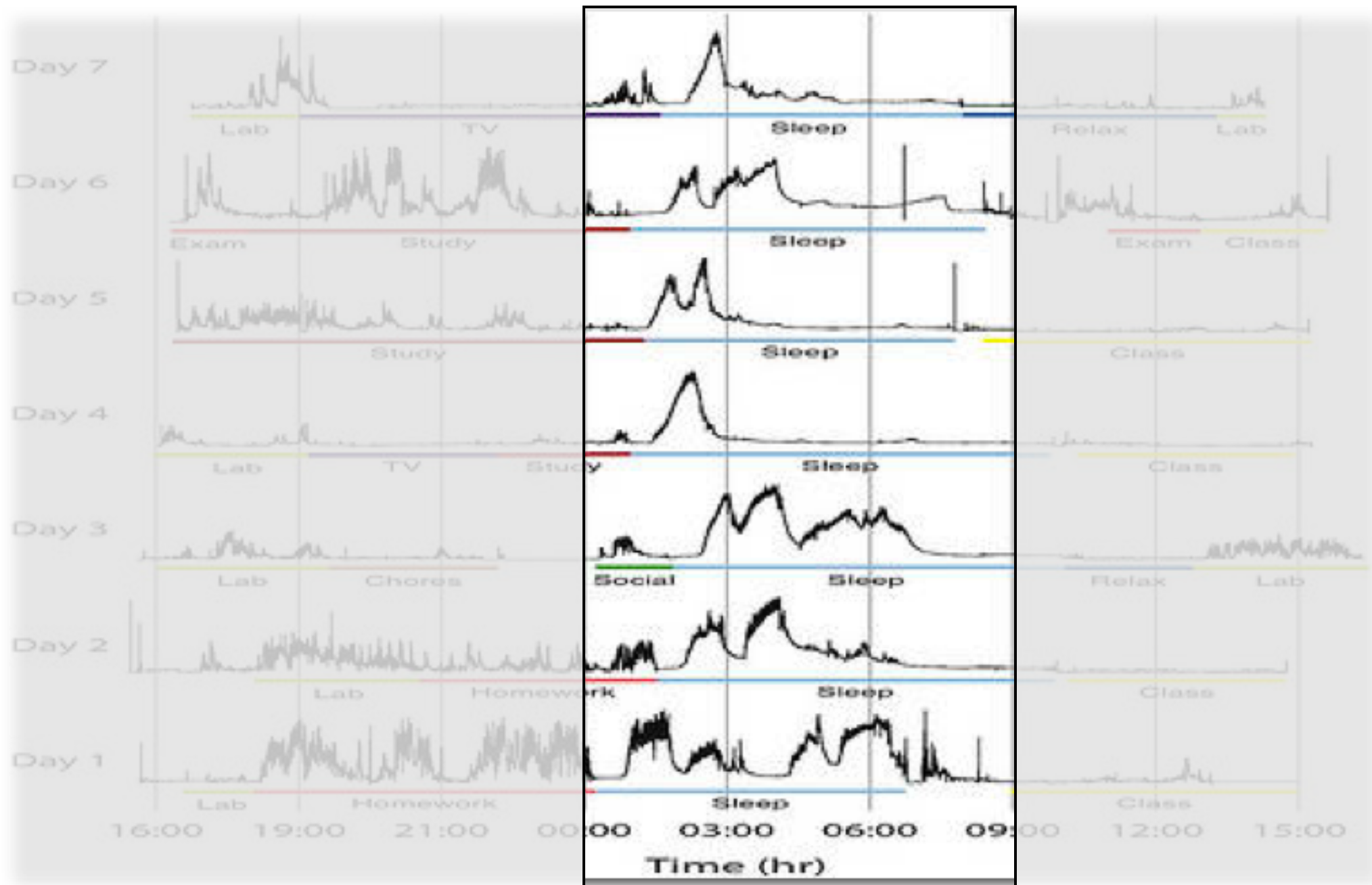
CHUNK IT

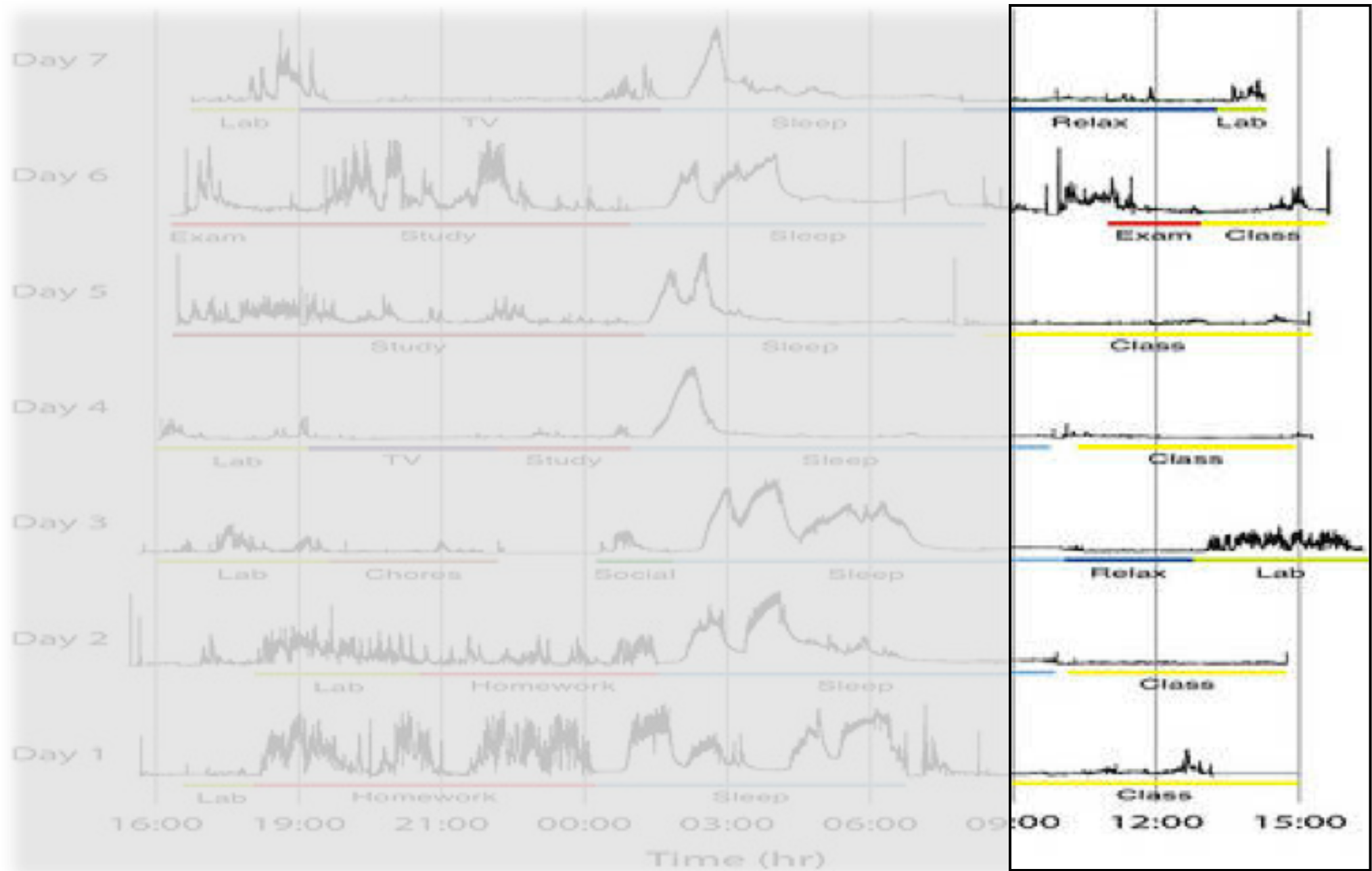
lecture

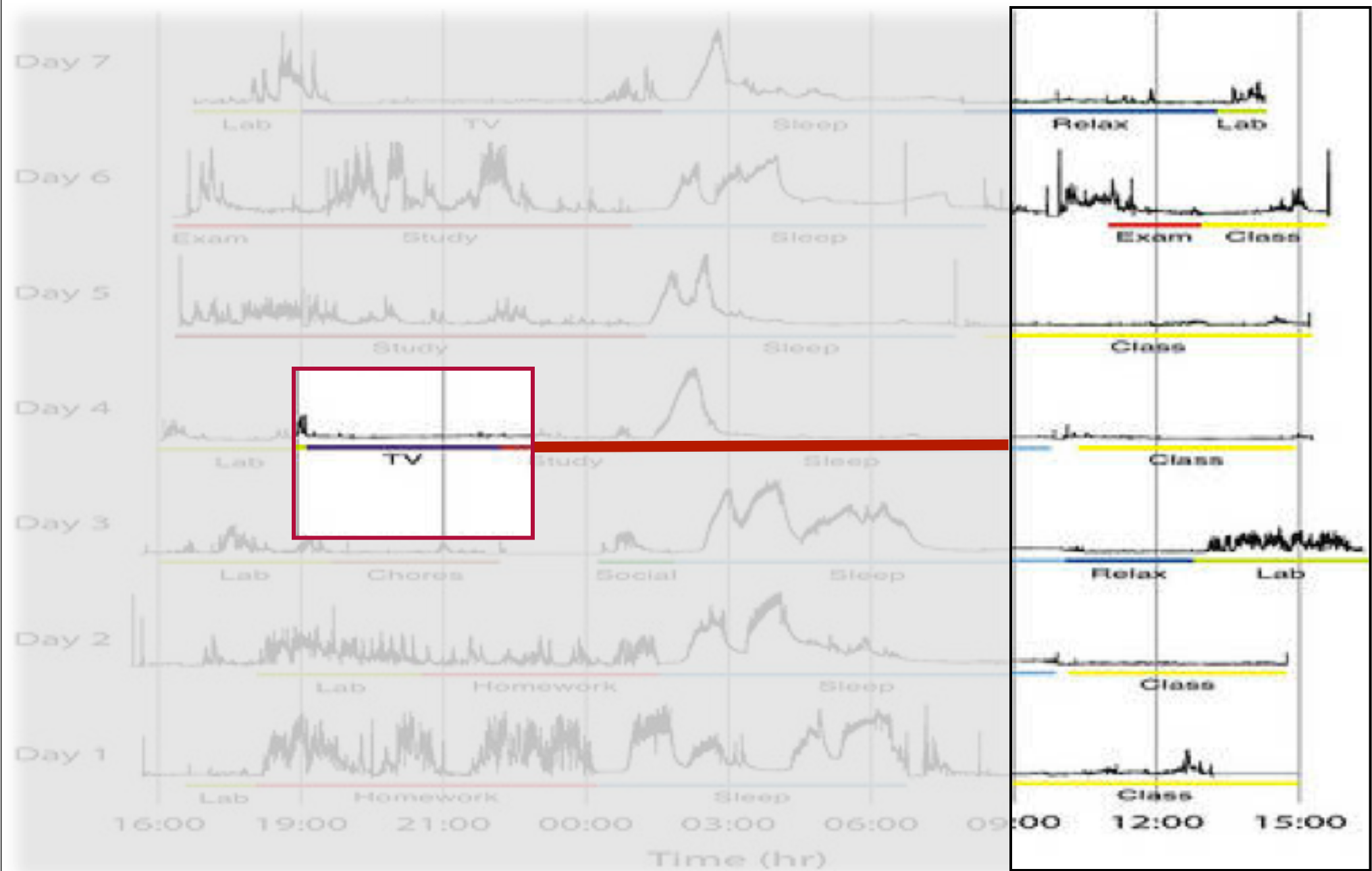
0 min

40 mins

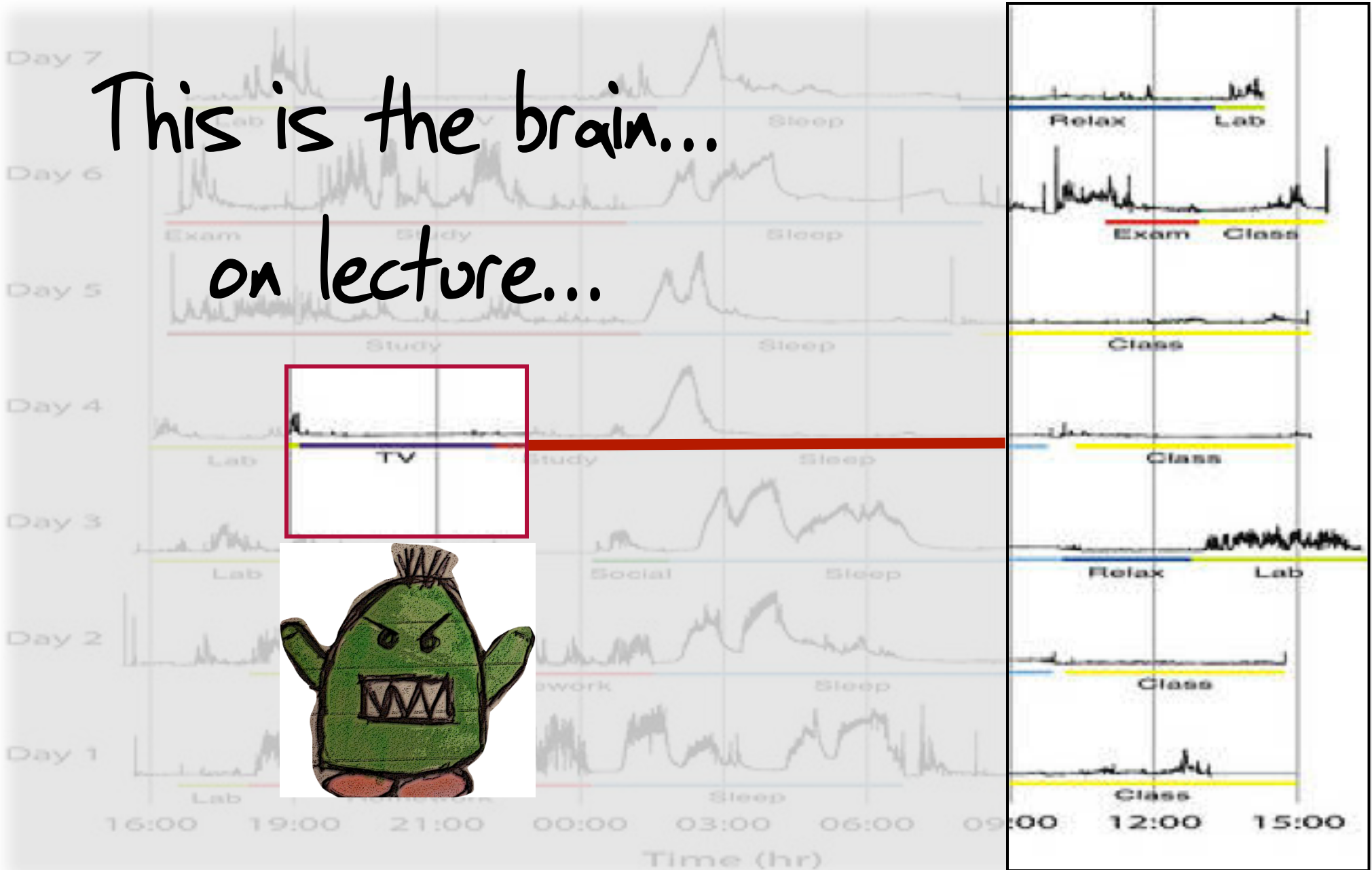


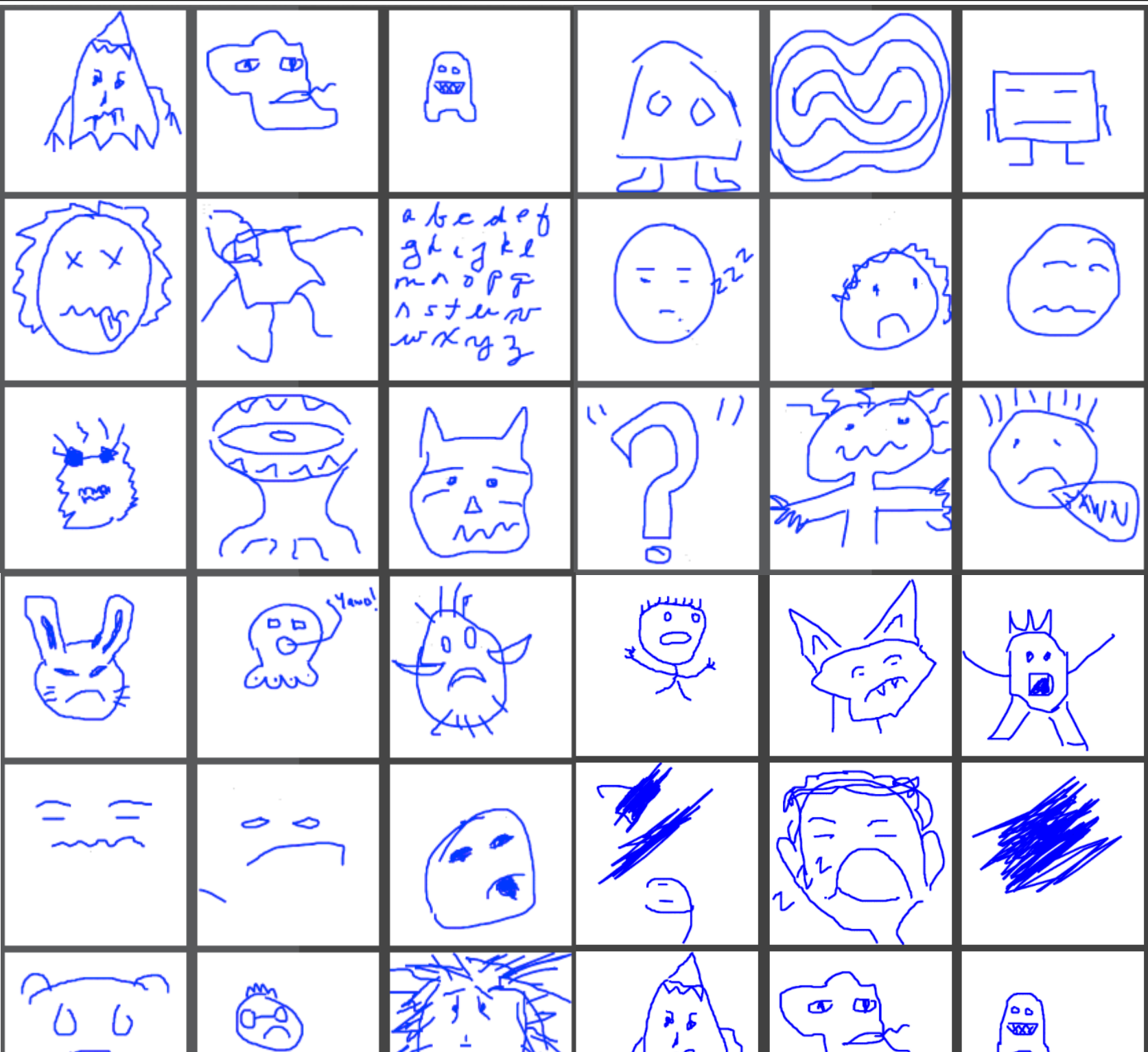




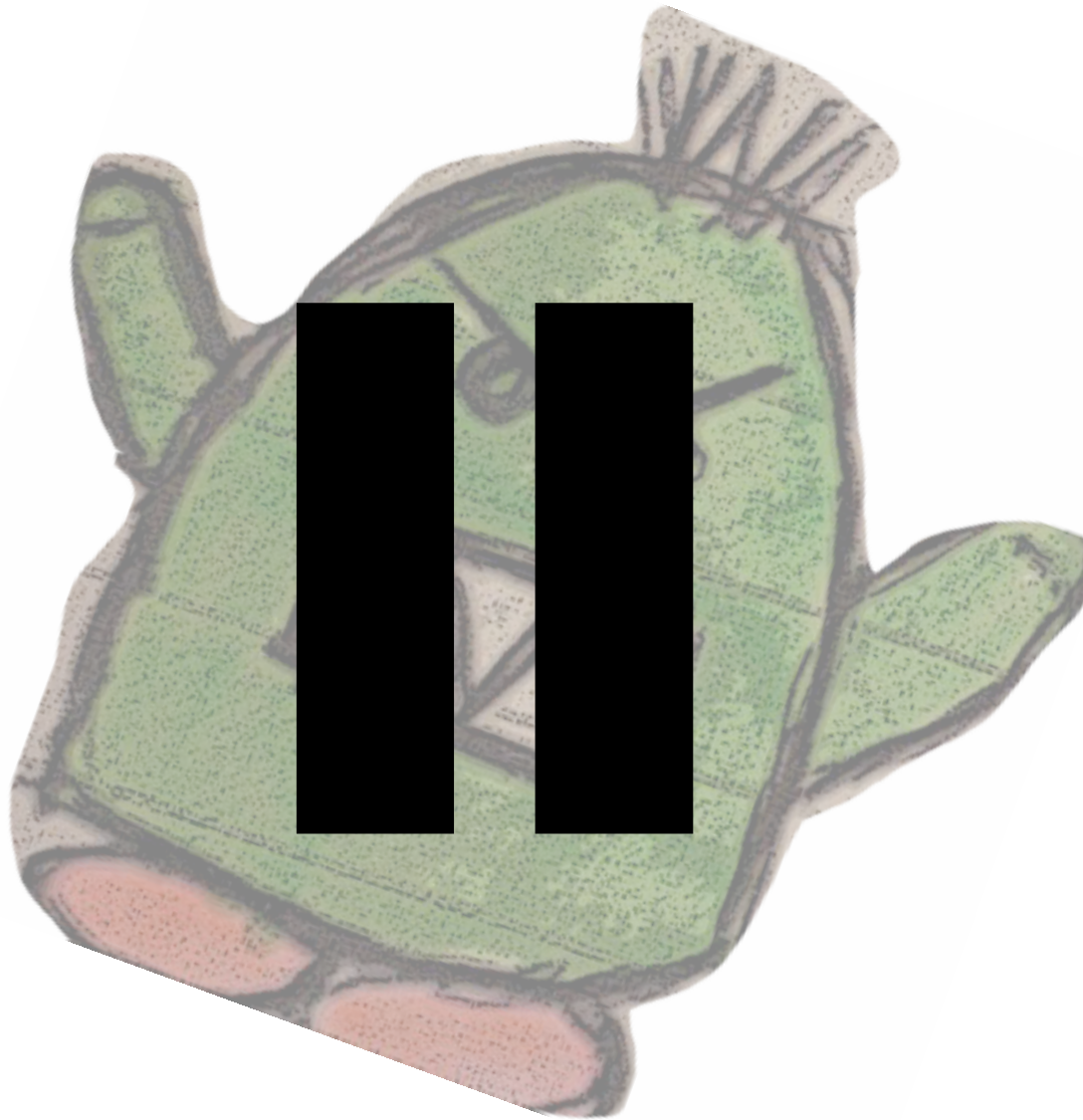


This is the brain...
on lecture...





Chunking



Pause Method Is Your Friend

lecture

0 min

40 mins

lecture

lecture

lecture

lecture

0

10

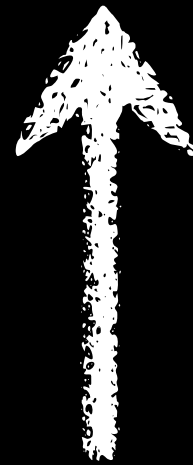
20

30

40



CHUNK IT



engagement
retention
performance



2

**CHUNK IT...
WITH RETRIEVAL PRACTICE**

Chunking with Retrieval Practice

Test

Test

Test

Test

|

|

|

|

lecture

lecture

lecture

lecture

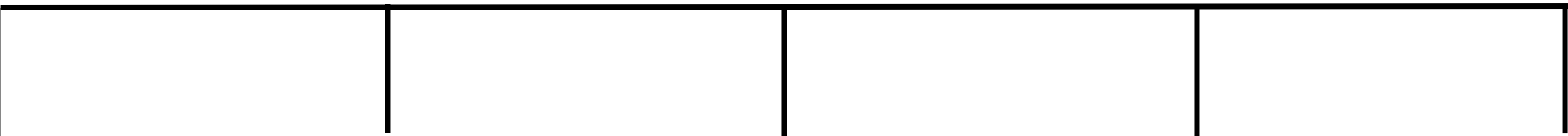
0

10

20

30

40





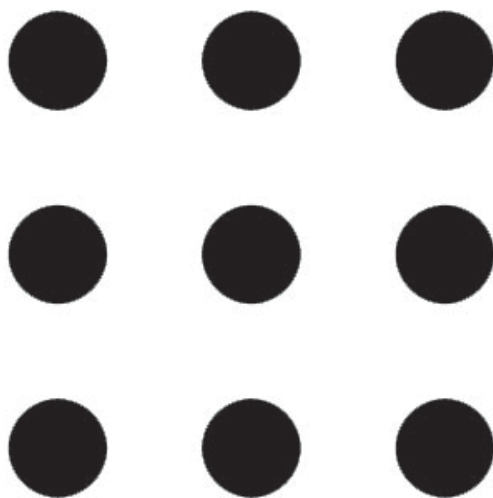
If you assess it...
they will come

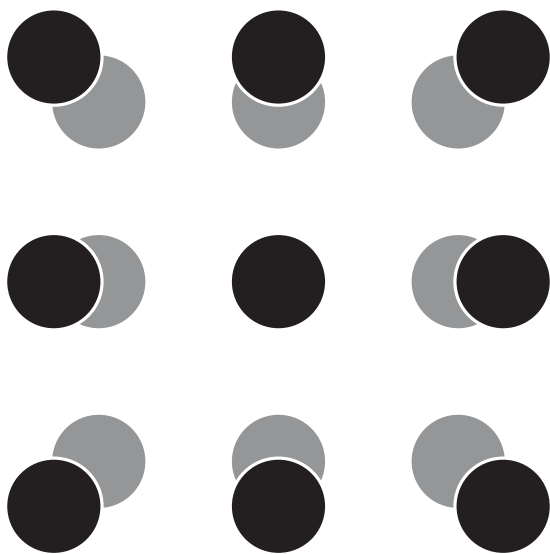


Thermal Expansion



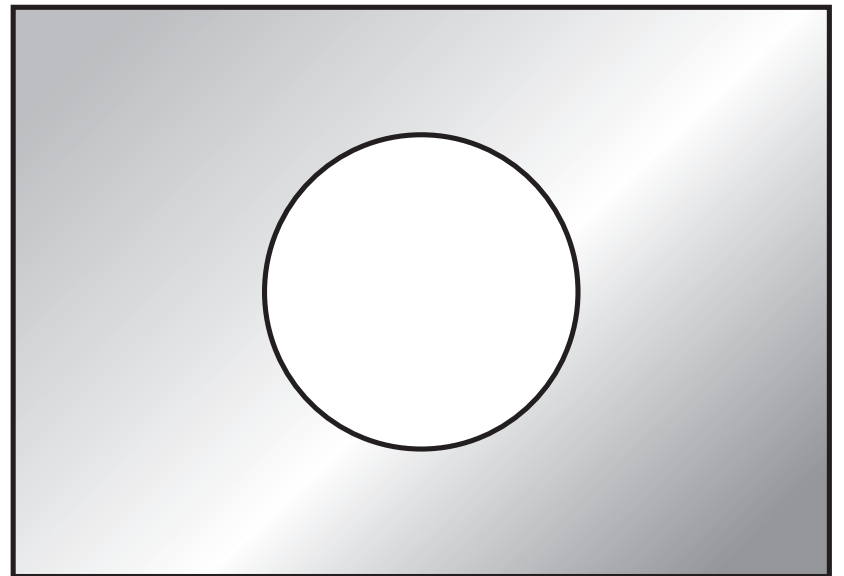
When metals heat up, they
expand.





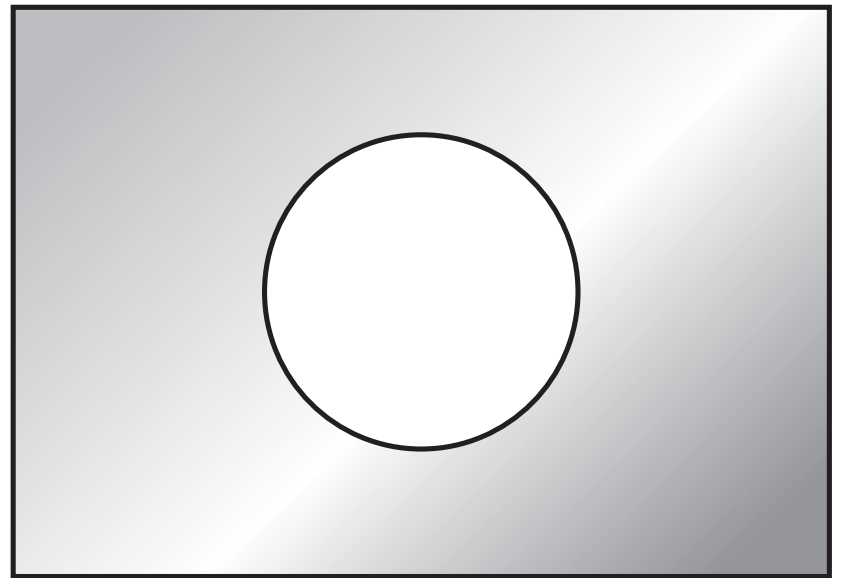
Consider an aluminum plate with a hole in it.

- A. increases**
- B. stays the same**
- C. decreases**



Consider an aluminum plate with a hole in it.
If you heat it uniformly what happens to
diameter of hole?

- A. increases**
- B. stays the same**
- C. decreases**



What happens when you heat metals up?

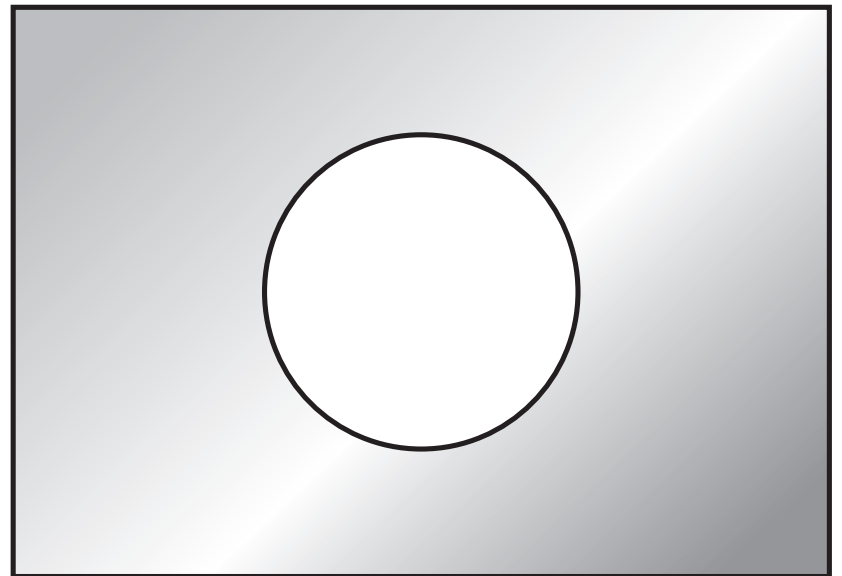
- A. they expand**
- B. they stay the same**
- C. they get smaller**
- D. who cares?**

If you heat it uniformly what happens to diameter of hole?

A. increases

B. stays the same

C. decreases



What just happened?

1. made a commitment, gained awareness of knowledge state

2. externalized your answer

3. moved from the answer to reasoning

4. became emotionally invested in the learning process

Follow now!



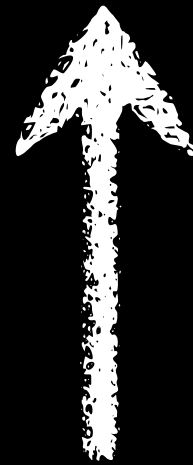
blog.peerinstruction.net

What's the pause method?

- A. A key part of thermal expansion theory**
- B. A way to chunk direct instruction**
- C. A learning theory**
- D. Not sure**

2

CHUNK IT...WITH TESTS



note taking
retention
performance

3

PLAY WITH VELCRO

Study these letters, don't write them down.

Study these letters, don't write them down.

J FKFB INAT OUP SNA SAI RS

Study these letters, don't write them down.

Study these letters, don't write them down.

J FKFB INAT OUP SNA SAI RS

Study these letters, don't write them down.

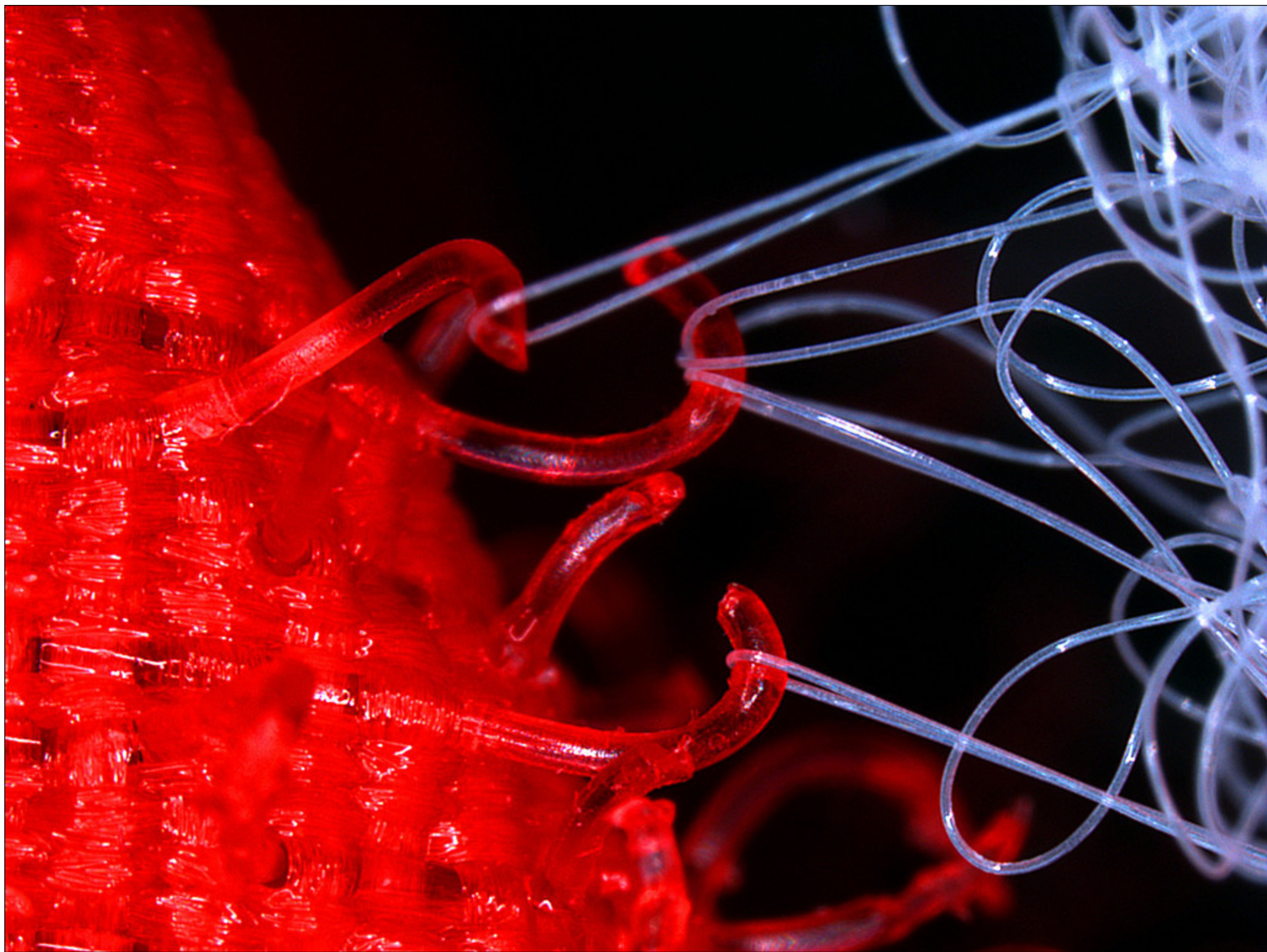
Study these letters, don't write them down.

JFK FBI NATO UPS NASA IRS

Study these letters, don't write them down.

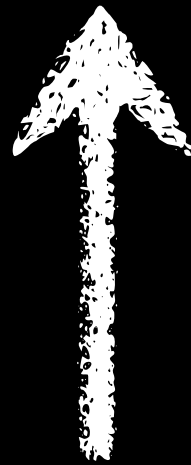
Study these letters, don't write them down.

JFK FBI NATO UPS NASA IRS



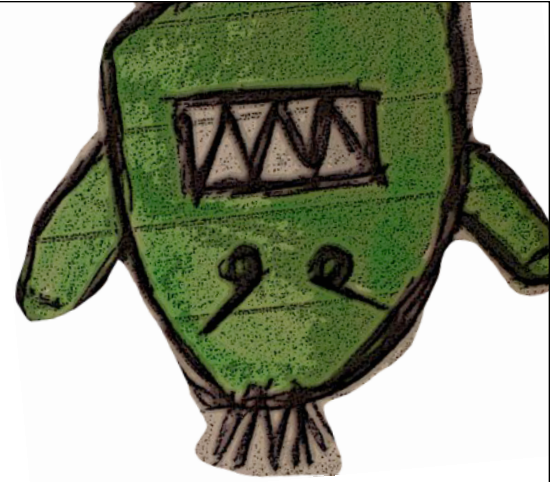
3

PLAY WITH VELCRO



retention
engagement
transfer of learning

What stuck with you the most from this session?



How will you use this learning to slay the your boredom monster?

 ONRAMPS

TEXAS COLLEGE READINESS



Tyson_Awesome @tegrinse614

6 hrs

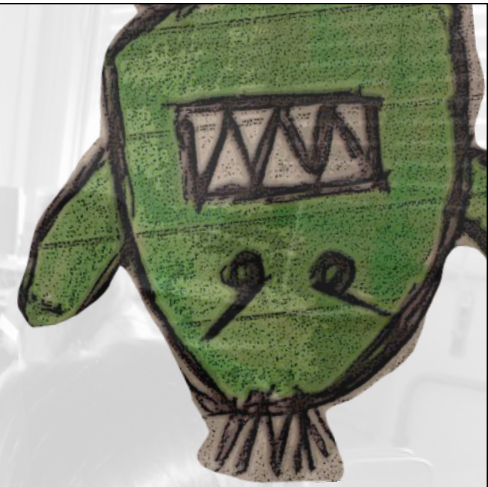
today I developed my own proof for **pythagorean's** theorem. woooo
yeah baby **#genius**

Expand

PEOPLE

Eric Mazur

Acknowledgements



James Fraser

Ives Araújo

Cassandra Alvarado

Brian Lukoff

Jen Ebeler

Carol Dweck

Dan Meyer

Nancy Duarte

Chip and Dan Heath

BOOKS

Flip Your Classroom

Slide!Dology

Made to Stick

Why Students Don't Like School



www.julieschell.com

@julieschell

