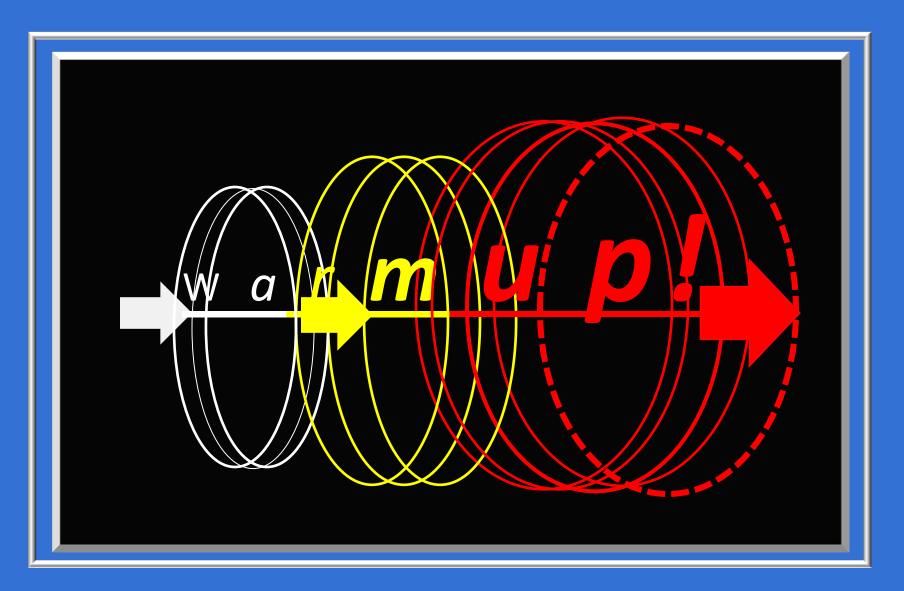


# Computer Tech 2018

Northwest Florida State College Niceville, Florida

Saturday, January 27, 2018



January 27, 2018

# Best Guesser ?

### Take Out Your .....



Pencil and Notepaper.



Cellphone & Unlock, Set Camera on Ready. Meet Person Sitting Next to You!



Find Out as Much as You Can!

# OK! What did You Learn in Three Minutes?

3

- First and Last Name? (Wrote it Down?)
- Where they are from? USA or Canada
- First time at Computer Tech?
- Take Selfie?
- The Classes of Interest?
- Email Address?
- Member of local computer user group?
- Apple or Microsoft user?
- Favorite local restaurant.

# Blue Moon January 31, 2018



Read Page In 2 Seconds Without Turning **Head Upside** 

> NOM OBEN Registration

NOM OBEN Registration

NOM OBEN

Motorcycle Safety

Fitness & Wellness

Personal Enrichment

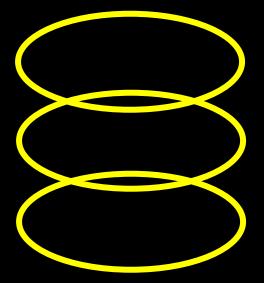
**CLASSES** SCHEDNIE OF SPRING 2018

CONTINUING EDUCATION STATE COLLEGE NORTHWEST FLORIDA

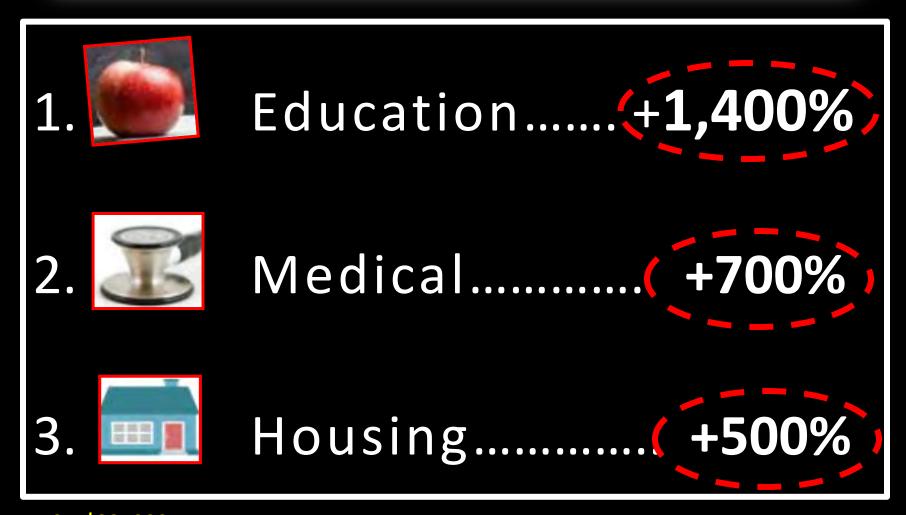


# % of Change Since 1978 Fill in Circles: 500%, 700%, 1,400% or None of These %

- MEDICAL %.
- HOUSING %.
- EDUCATION %.



#### Correct Answers



#### Higher Education Disruption

- Harvard's Clay Christensen Father of the Theory of "Disruptive Innovation."
  - "Technology enables new business models"

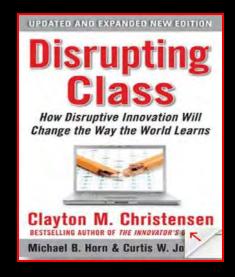
#### Prediction.

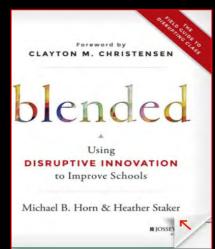
"Half of American Universities

<u>Close</u> or go Bankrupt within 10-15 years."

# Disruption, Disruption, Disruption, 2005 2010 2014

**BUKU BESTSELLER INTERNASIONAL** TERJUAL LEBIH DARI 3.5 JUTA EKSEMPLAR TELAH DITERBITKAN DALAM 44 BAHASA "Sangat penting bagi setiap penentu strategi atau pengusaha bila ingin keluar dari persaingan yang makin sengit." -Business Insider BLUE OCEAN STRATEGY Menciptakan Ruang Pasar Tanpa Pesaing dan Menjadikan Persaingan Tidak Lagi Relevan W.CHAN KIM | RENÉE MAUBORGNE Pengantar: Kevin Mintaraga





# most students Ose focus at 5? 25? 45? 55? Or None of the Above? minutes

"take minimum 5 minute break"





## Pomodoro 25





#### Six Steps in Technique

- Decide task.
- Set Pomodoro Timer 25 minutes.
- Work until timer rings.
- After timer rings put a checkmark on paper.
- Fewer than four checkmarks take 3–5 minute break. (Use break to process new information.)
- After four Pomodoro's, take 15–30 minutes, and reset your checkmark.

# Time Remaining



Time remaining in the Pomodoro devote to over learning.

Use Cellphone Camera Take Photos of Interesting PowerPoints!



#### Professional









- ☐ Graduate of Florida State University. Post graduate work at Cornell University, University of Georgia, Texas A&M & Tulane University.
- Army & Air Force Exchange Service (AAFES) 32 Years; West Germany, North Africa, Turkey, Texas, Okinawa/Japan, Florida, Georgia, South Korea & California.
- ☐ Continuing Education; Columbia UniversityX, UC San DiegoX & HarvardX and Computer Tech Seminars.

### Activities

- ☐ President, South Walton Computer & Technology Club (SWCTC) since 1995.
- Computer Instructor NWFSC, PE.
- ☐ P/VP, NWFACUG Annual Computer Tech.
- President Beacons HOA.
- International Executive Service Corps
- Management Consultant.

Cats 6 + 1 = 7

# Form Your (Teams)



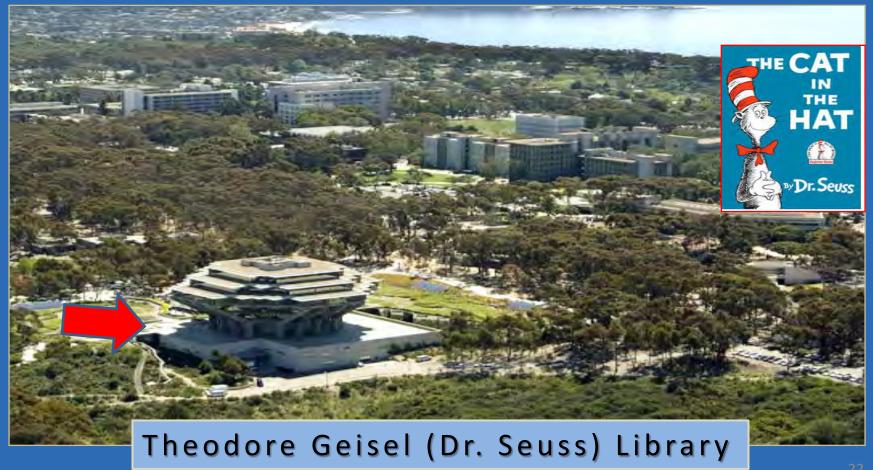
Select your

#### Team Leader

- Pick your best answer to quiz.
- Team Leaders presents best answer.

#### University of California San Diego

Top Rated University in the USA 36,000 Student Body





# Learning How to Learn

#### Most Popular of all MOOCs.

"Massive Open Online Courses"

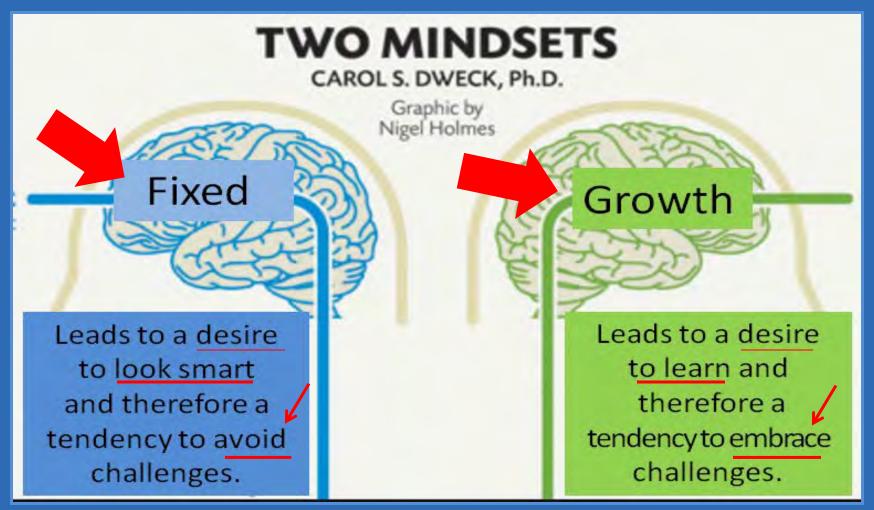
## Learning How to Learn

Quiz: How Many Students Taken Course?

**2,000 - 20,00***0* **- 200,000 - 2,000,000?** 

None of the Above

#### Which Mindset do You Have?





# What is Learning?

 Learning is connecting new knowledge to previously existing knowledge.

• It's that <u>simple</u> and that <u>complicated</u>.



## The Primary Way We Learn

- We Learn from Feedback.
- Usually this comes from making mistakes and errors.
- Seeing how our effort falls short or are misconstrued.
- Revising and trying again.



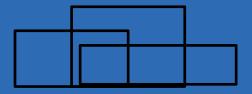


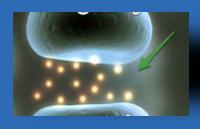
## Short-Term Memory

- Our Immediate Consciousness.
- Where we do our thinking.
- Where we do our reasoning.
- Holds information (4 Chunks) for short-term.

Quiz: Usually for how many seconds?

8, 10, 15, 18, 20, 22, 25, 30, 35 or none?





# Long Term Memory

- Short Term Memory acts like sticky note.
- Long-term memories made w/meaningful info.
- Repetition (Rehearsal.)
- Elaboration.
- Organizational Schemas (mental frameworks)
- Multiple modes. create stronger memories engaging visual, auditory, and kinesthetic senses (detects weight, body position.)
- Sleep & Breaks.

# Neurons



- Basic working unit of the brain.
- Approximately 100 billion (100,000,000,000)
- Transmit info to nerve cells, muscle, or gland cells.
- Neurons die out with normal aging? True or False?

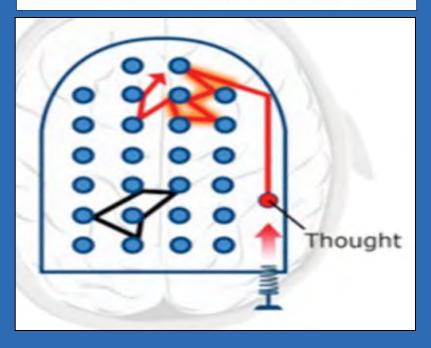
http://www.brainfacts.org/



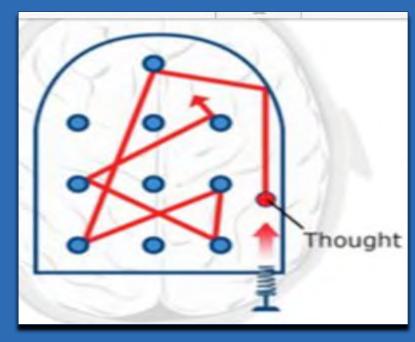
- Memory consolidation. (Not enough sleep = lost knowledge.)
- Strengthening neural connections that form memories.
- Clears brain of damaging molecules associated with neurodegeneration.
- Neurons in the <u>brain fire nearly as much</u> as they do during waking hours? True or False?

# Modes of Thinking

# Focused

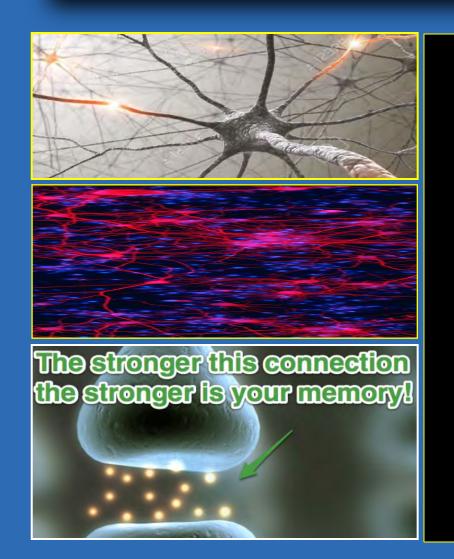






https://www.youtube.com/watch?v=xwerGeaKfeg

#### Neuroscientists Know



You are either in Focused Mode

or

Diffuse Mode

of thinking!

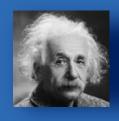
True, False or Maybe?

## Have What One Thing in Common?



- A. Power Napping?
- B. Same Birth Month?
- C. Left Handed?
- D. Great Cooks?
- E. None of the Above?

https://www.youtube.com/watch?v=WSGbllclDeo



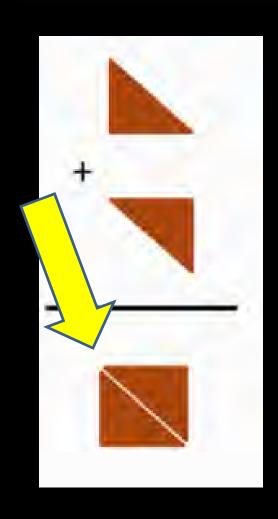
#### Albert Einstein's Secret Weapon

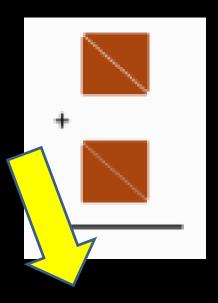
- Prop hand on elbow.
- Clutch a handful of ball-bearings.



- Drift off to sleep.
- Let subconscious mind take challenge of problem and provide a solution.
- Fall into a deep sleep, let hand drop ball-bearings and wake up again.
- Write down what was in mind.
   Note: Highly potent for invention and creative mind prospecting.

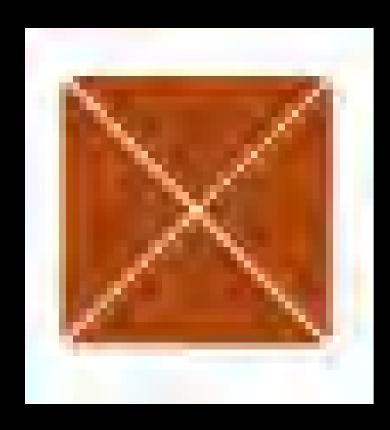
#### Combine Two to Make a Square





Square?

# Answer



n

e

's a cognitive exercise that can help you feel the from focused to diffuse mode. See whether you can form a new triangle that points down by moving only three coins.

When you relax your mind, releasing your attention and focusing on nothing in particular, the solution can most easily come to you.



# Answer





#### Question

What do you do when you *cannot* figure something out?



## Chunking

Process of taking individual pieces of information (chunks) and grouping them into larger units.

| Unchunked   | Chunked   |
|---|---|
| Maine Oregon Nevada New York Washington California New Hampshire Virginia | East Coast  Maine New York New Hampshire Virginia |
|   | West Coast Washington Oregon California Nevada    |

#### Can You Chunk This?

081127882

# Interleaving

- Extraordinarily important.
- Leaving the world of Practice and Repetition.
- To building flexibility and creativity.
- To thinking more independently.
- To interleaving between subjects.
- https://www.youtube.com/watch?v=WbDpYMp8 F6o



#### Value of Teamwork

- Study with friends.
- Take a mental break.
- More easily catch mistakes.
- Revisit what you've done with others.
- Does it make sense or have errors.
- Explaining to friends builds your understanding.

### Become A Better Learner



# Aerobic? Sitting?



Quiz: Which One?

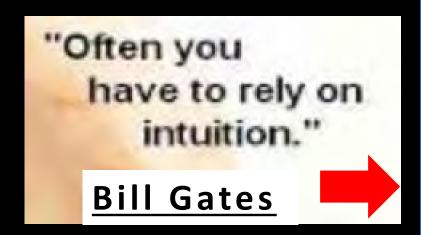
None of the Above?

## Two Ways to Solve Problem

#### Reasoning

## \*sequential

- Step by Step
- Towards Solution or





- Most difficult problems and concepts will leap away from familiar.
- Lady Luck favors person trying.



## Flashçards



#### Mistakes:

- 1. Not making your own cards.
- 2. Studying in a "Cram Session"
- 3. Practicing mindlessly.

  Try These

  Anki Software

  Spaced Repetition

Hands-down

MOST

effective way

for motivated learners to study & retain factual knowledge.



### Procrastination

- Pain associated with something not wanting to do. T or F
- Brain tries <u>switching</u> your attention to something else.
- The trick: continue and neuro-discomfort disappears quickly or use:

#### The **Pomodoro Technique**

Set timer & focus **25 minutes** with no interruptions.



#### Create a Study Area

environment highly affects the way you act

- -Bedrooms are for <u>sleeping</u>, Kitchens for <u>eating</u>: you'll feel sleepy in your bedroom and hungry in the kitchen.
- Have a study area, easier to start studying and staying focused.
- -Study in a <u>specific room</u> like an office or school library if you can.



## New & Difficult Learning

- Find Quiet Place with <u>no</u> Distractions. T or F?
- Go Back and Forth between Focused and Diffuse Modes.
- Avoid Cognitive Overload.
- Use Spaced Practice and Interleaving.
- Use Pomodoro Timer.
- Get a Nights Sleep.







## Rules of Good Studying

- 1. <u>Use Recall</u> look away recall main ideas.
- 2. Test Yourself Use Flashcards.
- 3. Chunk your Problem.
- 4. Space your Repetition.
- 5. Alternate Problem Solving Techniques.





## Rules of Good Studying

- 6. Take Breaks.
- 7. Use Explanatory Questioning.
- 8. Focus Turn off TV/Cell Phone.
- 9. Hardest Things First.
- 10. Make a Mental Contrast. (Picture)



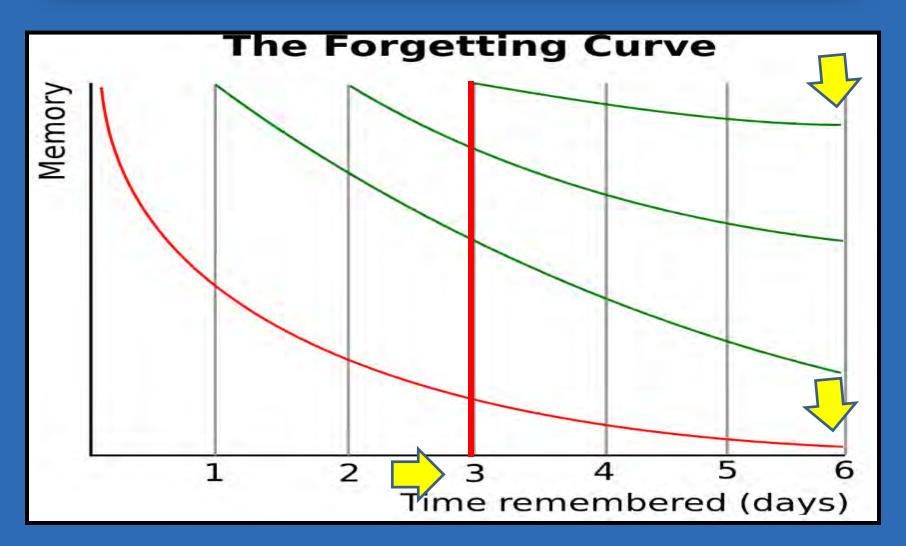
#### Practice Makes Permanent

- 1. Study the "something" hard by focusing intently.
- 2. Take a break or change your focus to give the brains Diffuse Mode an opportunity to work and build neural patterns.
- 3. Go over *each step in your mind* until you have it down cold.

Quiz: **Cramming** is the best method for learning?

**True or False** 

## Spaced — Practice





## Quiz: True or False

- 1. <u>Use of **Hi-Liter** can improve memory retention up to 50%?</u> **T or F**
- 2. Research shows studying with background music is relaxing and helps the learning process? T or F
- 3. Playing TV in the background is OK? T or F
- 4. Sitting up in **bed** is best place to study. T or F
- 5. Cramming is the best method of study? T or F
- 6. <u>Reading</u> text over and over out loud is best method for retention? T or F



## Recall Information

- Trying to <u>simply recall</u> information is a lot harder than <u>rereading a text</u> or looking at notes, but it's precisely that <u>struggle</u> to recall that <u>improves our memory</u>.
- Cramming, or massed practice, does work for creating long-term memories. T or F

#### a MIND for NUMBERS

Amazon Paperback \$11.99

| Copyrighted Material                    | 4 Chunking and Avoiding III Competence: |
|---|---|
| a MIND =                                | The Keys to Becoming an "Equation W     |
| $a \left  \frac{1}{\text{for}} \right $ | 5 Preventing Procrastination            |
| 101                                     | Enlisting Your Habits ("Zombies") as I  |
| NUMBERS                                 | 6 Zombies Everywhere:                   |
| MOMIDITION                              | Digging Deeper to Understand the Hal    |
| 4 9 8 8 9 5 0<br>402 3 V 2 8 8          | 7 Chunking versus Choking               |
|   | How to Increase Your Expertise and R    |
| DVCEL AT                                | 8 Tools, Tips, and Tricks               |
| HOW TO EXCEL AT MATH AND SCIENCE        | 9 Procrastination Zombie W              |
| (Even If You Flunked Algebra)           |   |
|   | 10 Enhancing Your Memory                |
| BARBARA OAKLEY, Ph.D.                   | 11 More Memory Tips                     |
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|---|---|
| The Keys to Becoming an "Equation Whisperer"              |   |
| Preventing Procrastination:                               | 83  |
| Enlisting Your Habits ("Zombies") as Helpers              |   |
| Zombies Everywhere:                                       | 93  |
| Digging Deeper to Understand the Habit of Procrastination |   |
| Chunking versus Choking:                                  | 112   |
| How to Increase Your Expertise and Reduce Anxiety         |   |
| Tools, Tips, and Tricks                                   | 126   |
| Procrastination Zombie Wrap-Up                            | 144   |
| Enhancing Your Memory                                     | 155   |
| More Memory Tips  | 168   |
|   | Competence: The Keys to Becoming an "Equation Whisperer"  Preventing Procrastination: Enlisting Your Habits ("Zombies") as Helpers  Zombies Everywhere: Digging Deeper to Understand the Habit of Procrastination  Chunking versus Choking: How to Increase Your Expertise and Reduce Anxiety  Tools, Tips, and Tricks  Procrastination Zombie Wrap-Up  Enhancing Your Memory |

213 Pages

# Students don't learn everything that is taught to them!



 That is why <u>feedback</u> provided through <u>assessments</u> (TESTS) is one of the <u>most important</u> elements of effective teaching.



Reading information aloud to yourself results in the best remembering?

True or False



# Learning How to Learn:

"Powerful Mental Tools to Help you Master Tough Subjects"

Dr. Terrence Sejnowski & Dr. Barbara Oakley

Started: Jan 22, 2018

3 - 4 Hours a Week - 4 Weeks Long

https://www.coursera.org/learn/learning-how-to-learn

## Mindshift

**Mindshift: Break Through Obstacles to Learning and Discover Your Hidden Potential** McMaster University via Coursera February 12, 2018

## **ELASS CENTRAL**

Best Online Courses from Top Universities <a href="https://www.class-central.com/">https://www.class-central.com/</a>



Harvard Open Courses Under Open Learning Initiative (OLI), Harvard has launched a plethora of free courses to everyone around the world.

Coursera The most popular provider of massive open online courses globally.

edX Owned by MIT & Harvard University. It's one of the largest provider of MOOC education internationally.



#### mean Popular Organizations Creating MOOCs

Stanford University

160 Courses / 159.1k following

Harvard University

121 Courses / 169.6k following

University of Toronto

24 Courses / 27.4k following

Yale University

24 Courses / 47.3k following

University of Michigan

127 Courses / 71.0k following

Indian Institute of Technology Bombay

25 Courses / 12.3k following



#### m Popular Organizations Creating MOOCs

Massachusetts Institute of Technology

151 Courses / 118.8k following

Georgia Institute of **Technology** 

100 Courses / 50.7k following

Johns Hopkins University

90 Courses / 69.3k following

University of California, Berkeley

59 Courses / 72.4k following

University of Pennsylvania

137 Courses / 78.6k following

Microsoft

225 Courses / 161 following

## \$300,000,000



Gates foundation more than \$300 million.



Zuckerberg Initiative to set aside a \$12 million grant to support research and development into new ways of tailoring classroom instruction to individual students.

## The Future Classroom?

- The fact, only 4 percent of students who enroll in a Massive Open Online Course (MOOC) will actually complete the course.
- Immersive virtual reality (VR) could radically change that experience.

"Individuals who have more access to education not only learn more but live longer and are better citizens."

"Most elite schools thrive on Rankings, Research, Real Estate, and Rah (Sports). Students who are not attending these elite institutions, the "four Rs" offer poor value for the expense of a college education."

