Hello!

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- 2. Chesterton High School
 - a. AP Micro, AP Macro, On-Level Economics
 - b. Taught AP Psychology and On-Level Psychology
- 3. I am finishing my master's in Economic and Entrepreneurship Education from the University of Delaware.
- 4. I ask only one thing...have an open mind.
- 5. Okay...two things...no judgment. Be honest with each other and, more importantly, be honest with yourself!

@coach__starkey for all you Twitterers...



"Monday night, a 17-year-old suburban youth was shot in the abdomen by an unknown gunman. Witnesses claimed the shot was fired from a blue Chevrolet van that moved down the street slowly until after the shooting, when it turned a corner and disappeared before anyone could get more than the first two letters from the license plate. The victim dropped out of school in the 10th grade and is believed to be one of the 'superior seven,' a group of teenagers who sell marijuana on street corners near several local high schools. A spokesperson for the police department declined to say whether the police believe the shooting is related to the continuing war between rival gangs over territories for selling drugs. The condition of the victim is described as stable."

How good are you at multitasking (scale of 1-5, 1 being the best)?



How often do you use your phone while performing other activities such as grading, driving, dinner, conversing, etc. (1-5, 1 being all the time, 5 never)?



Are your students good multitaskers (yes, no, some are good)?



Can a person become a good multitasker or are you born with it?



- Dan Simon's theory
- The Illusion of Attention is pretty broad and includes:
 - Inattentional Blindness
 - Multitasking
 - Change Blindness





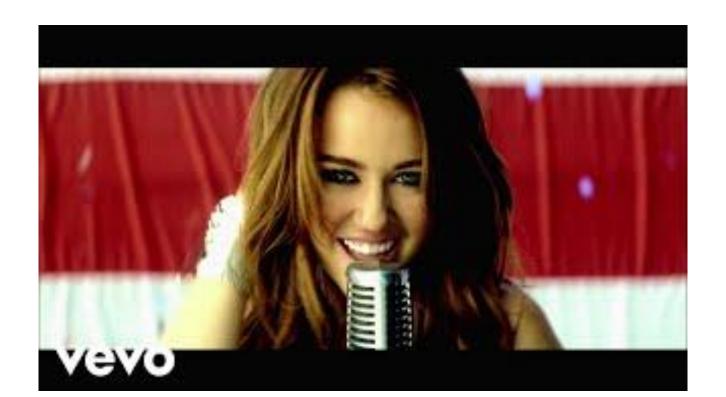


 These are both examples of inattentional blindness. We are concentrating on one thing and it's difficult to notice other things that are going on around us.

- Multitasking



- It's really difficult to do more than one thing at time...
- Let's run our own experiment...



- Change blindness - when things change slowly, it's tough for us to notice.





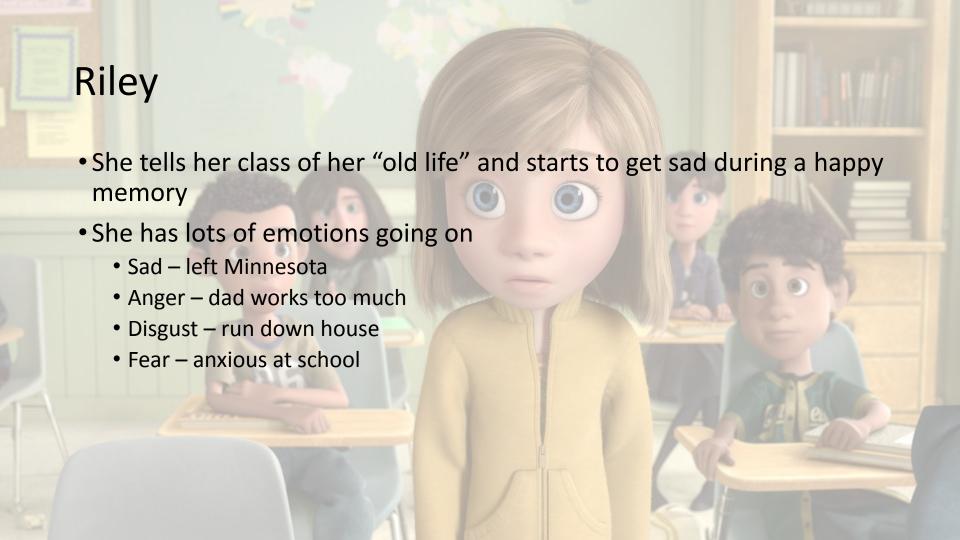
Did you notice...

I've actually worn 3 different shirts and hats/visors during this workshop.



How can change blindness be dangerous for teachers?

- Early Onset Depression
- Inside Out is a great example



Riley

- Joy and Sadness leave the control center, leaving Riley with no feelings of happiness or sadness
- She becomes withdrawn, apathetic, and bitter
- Irritability, not sadness, usually signals adolescent depression

Early-onset Depression

- Prospection how we think about the future
- If a person lacks the skill to think of many realistic outcomes and only focuses on the worst possible outcome, this is a sign of early depression
- "I'll never make any friends" vs. "I'll make a couple friends this year"
- "I'll never make the team" vs. "I can work hard and try again next year"
- These negative thoughts lead to feelings of hopelessness, which lead to more negativity
- People get "stuck" in that cycle

Change Blindness

- If you're lucky, you see your students every day for about an hour
- My school uses block scheduling, so we see the students for 90 minutes every other day
 - If I have them on a Friday, I don't see them again until Tuesday at the earliest...
 - We didn't have school on Friday. I had students Wednesday and then saw them again today. That's lots of time in between classes!
 - This doesn't take into account absences either!
- Imagine how much a student can change in that much time, and over the course of a semester or school year, we may not notice those changes.
- Keep an eye out for changes in your students it may be difficult, but it's important...

Illusion of Attention in the Classroom

- 1. How often do we ask (or expect) our students to multi-task throughout the school day?
 - a. I sometimes draw a graph while they copy it, all while I'm explaining the different parts of the graph.

- 2. With the adoption of 1 to 1 technology, how often are we the only person/thing that the student is focused on?
 - a. What is the best cell phone policy?

- 3. How can change blindness come into play in the classroom?
 - a. Students don't change immediately...it's a gradual process.

Remember the news report?



Questions from the news report

Only use information that we know to be factual...

- 1. When did the incident take place?
- 2. In what city did the incident take place?
- 3. What was the incident?
- 4. How old was the victim?
- 5. What was the victim's sex?
- 6. What was the victim's race?
- 7. What type of vehicle was at the scene?
- 8. Why did the incident take place?

- When?
 a. Monday night
 What city?
- a. We don't know...never stated.
- 3. Incident?
 a. A shooting
- 4. Age?
- a. 17 years old5. Sex?
 - a. Never stated
- 6. Race?
 a. Never stated
- a. Never stated7. Vehicle?
 - a. Blue Chevy van
- 8. Reason?
 a. We don't know for sure.

Was that difficult?

- Many people find it difficult to read and be read to at the same time.
- Reading and listening is a form of multitasking, which not only affects our attention but also our memory.
- How many times do we do something similar to this?
- Popcorn reading...
- Giving instructions after passing out the test...



TRUE OR FALSE – ONCE YOU HAVE EXPERIENCED AN EVENT AND FORMED A
MEMORY OF IT, THAT MEMORY DOESN'T CHANGE.

 TRUE OR FALSE – HUMAN MEMORY WORKS LIKE A VIDEO CAMERA, ACCURATELY RECORDING THE EVENTS WE SEE AND HEAR SO THAT WE CAN REVIEW AND INSPECT THEM LATER.

ILLUSION OF MEMORY

READ THE FOLLOWING LIST OF WORDS:

BED, REST, AWAKE, TIRED, DREAM,

WAKE, SNOOZE, BLANKET, DOZE,

SLUMBER, SNORE, NAP, PEACE, YAWN, DROWSY



 WRITE DOWN AS MANY OF THE WORDS FROM THE EARLIER LIST. NO RUSH, JUST TRY TO REMEMBER AS MANY AS POSSIBLE.

• HOW MANY OF YOU WROTE SLEEP? HOW MANY OF YOU FORGOT TO INCLUDE SLEEP?



- WE MUST UNDERSTAND THAT OUR MEMORIES CHANGE WITH NEW INFORMATION
- WE CAN'T ALWAYS TRUST OUR OWN MEMORIES

- WHAT DOES THIS MEAN FOR THINGS LIKE EYE-WITNESS TESTIMONY?
- CENTIER BANK HAS A DESCRIPTION ROBBERY KIT AT THEIR BANK IF THEY GET ROBBED
- ALL WITNESSES ARE NOT ALLOWED TO TALK TO EACH OTHER UNTIL AFTER THEY HAVE WRITTEN THEIR STATEMENTS AND SPOKEN TO THE POLICE

Illusion of Memory

We think that our memories are...

- better than they actually are.
- more accurate than they actually are.

How can memory affect us in the classroom?

Magic Number 7

- Capacity the magic number 7
 - People remember things in chunks of 7, +/- 2

Digit Span Test

•Digit span refers to the amount of information that you can maintain in consciousness at any given moment.

•To test your digit span, I'm going to read off a list of numbers. When I'm through, I'll have you write down as many of these numbers as you can recall.



Remember the numbers

- •2831
- •74139
- •497125
- •5183926
- •19563472
- •362519748
- •6154983287
- •89316427513

•XIBMCIAFBICBSMTV

X IBM CIA FBI CBS MTV

- Chunking the information makes it easier to remember.
- After a few (5-9) pieces of information, the brain has a hard time storing the info in the long term memory.

How reliable are our memories?

- As the more time passes, the more inaccuracies creep in
- Constructive processing
 - Memories are built from the piece stored away at encoding
 - Each time the memory is retrieved, it may be revised or altered to include new information
 - We don't like seeing ourselves in a bad light, so memories of our younger selves will be nicer/better than the event happened
 - "Kids these days..."
 - "We never acted like that..."
 - "The children now love luxury; they have bad manners, contempt for authority; they show disrespect for elders and love chatter in place of exercise. Children now are tyrants, not the servants of their households. They no longer rise when elders enter the room..."
 - Socrates 469-399 BC



People respond to incentives.

How do incentives come into play? A lot of our behavior is based on incentives.

Why are you here today?

Why do you teach?

Why do you do most of the things that you do?

There's no way you can tell me that incentives don't matter...

Look at Grandpa Joe -



This guy hadn't gotten out of bed in 20 years. But tell him he can tour a candy factory and look at him go! *shoutout to Matt Pierson for the example!

Incentives

Remember, this is a judgment-free zone...

Why do some teachers give a student a zero if they don't turn in an assignment?

Why do some teachers not accept late work?

Using incentives...

Do all students respond the same to getting a zero?

Do you always get your work turned in on time?

Do you always get your work done the correct way on the first try?

Experiment Time!

Each of you have received 3 folded sheets of paper. DO NOT WORK AHEAD.

You will unscramble the word to make a new word.

If I had the word ACT, I would make the new word CAT.

This is not meant to be difficult, so don't pressure yourself. It's not a race. When you're done with the first word, raise your hand.

DO NOT WORK AHEAD.

Video Time!



How did the students feel when they saw the other people were already finished?

- Confused
- Frustrated
- Rushed
- Stupid

What happened when they got to the third word?

One of the major fears of our students is not fitting in or looking dumb in front of others...

Learned Helplessness

Uncontrollable bad event

Perceived lack of control

Generalized helpless behavior

Learned Helplessness

According to Martin Seligman (found of Positive Psychology), learned helplessness is the hopelessness and passive resignation an animal or human learns when unable to avoid repeated aversive events

- People who feel helpless and oppressed often perceive control as external.
- It is important for young and old people alike to create environments that enhance our sense of control and personal efficacy (belief in one's own capacity to reach goals).
- Perceived control is basic to human functioning.

What does learned helplessness look like in the classroom?

- Refusal to ask for help, even if it's offered.
- Giving up quickly.
- Lack of effort.
- Diminished self worth and self efficacy (always having an excuse as to why a solution won't work)
- There's nothing I can do to change the outcome.

How getting a zero can lead to learned helplessness

- Let's make a couple assumptions...
 - We are using a standard 0-100 point grading scale
 - The student is a solid B student, getting 85% on any assignment
- A student gets an 85% on the first 2 assignments (worth 15 points each)
- They get a zero on the next assignment
 - Their grade goes from an 85% to a 57%
- It will take 14 more assignments for this student to get an 80%
- Kids know this zeroes can torpedo a grade
- Why keep working at that point?

How can we fight learned helplessness?

- Is failure final and permanent?
 - Think about whether you should give zeroes, accept late work, allow redos, or allow retakes...
- Praise and encourage the effort, not the perceived intrinsic ability of the student
 - "I can tell how much effort that took"
 - "You really improved, great job!"
- Be optimistic and model that mindset.
 - If you've made a mistake while teaching, own it.
 - Share stories of failures to show that they aren't permanent.
- If we're able to learn helplessness, we can also learn optimism.
 - Gratitude journals exist because they work.

Tips for Teachers to fight Learned Helplessness

- 1. Realize that failure is not final or permanent.
 - "I don't know it...yet."
- 2. Praise and encourage the effort, not the perceived intrinsic ability of the student.
- 3. Model the mindset you want your students to have.
 - Share your stories of failure to show that they aren't permanent.
- 4. If we can learn helplessness, we can learn optimism.
- 5. Be patient.

Tips for Students to fight Learned Helplessness

- 1. Ask for help.
 - There's no reason to think you have to go through everything on your own.
- 2. Confused about something in class? Ask!
 - If you're confused about it, there are probably 4 or 5 of your classmates that are confused too.
- 3. Growth is more than your grade.
- 4. Set realistic goals for yourself.
- 5. Focus on getting marginally better at things. Success won't happen overnight.

Tips for Students to fight Learned Helplessness

- 6. Just because you didn't learn it now doesn't mean you aren't ever going to learn it.
- 7. Mistakes often mean you're learning.
- 8. Be willing to push your limits. Try something new and different.
- 9. Just because you've always done things one way doesn't mean that's the best way to do them. Try taking notes by hand, or on the computer, or not at all and see if it works.
- 10. Notice the good things when they happen. If you can learn helplessness, you can learn optimism. It takes time and effort, but it's possible.
 - Write down 3 things each day that are good. You will start to notice more and more each day.