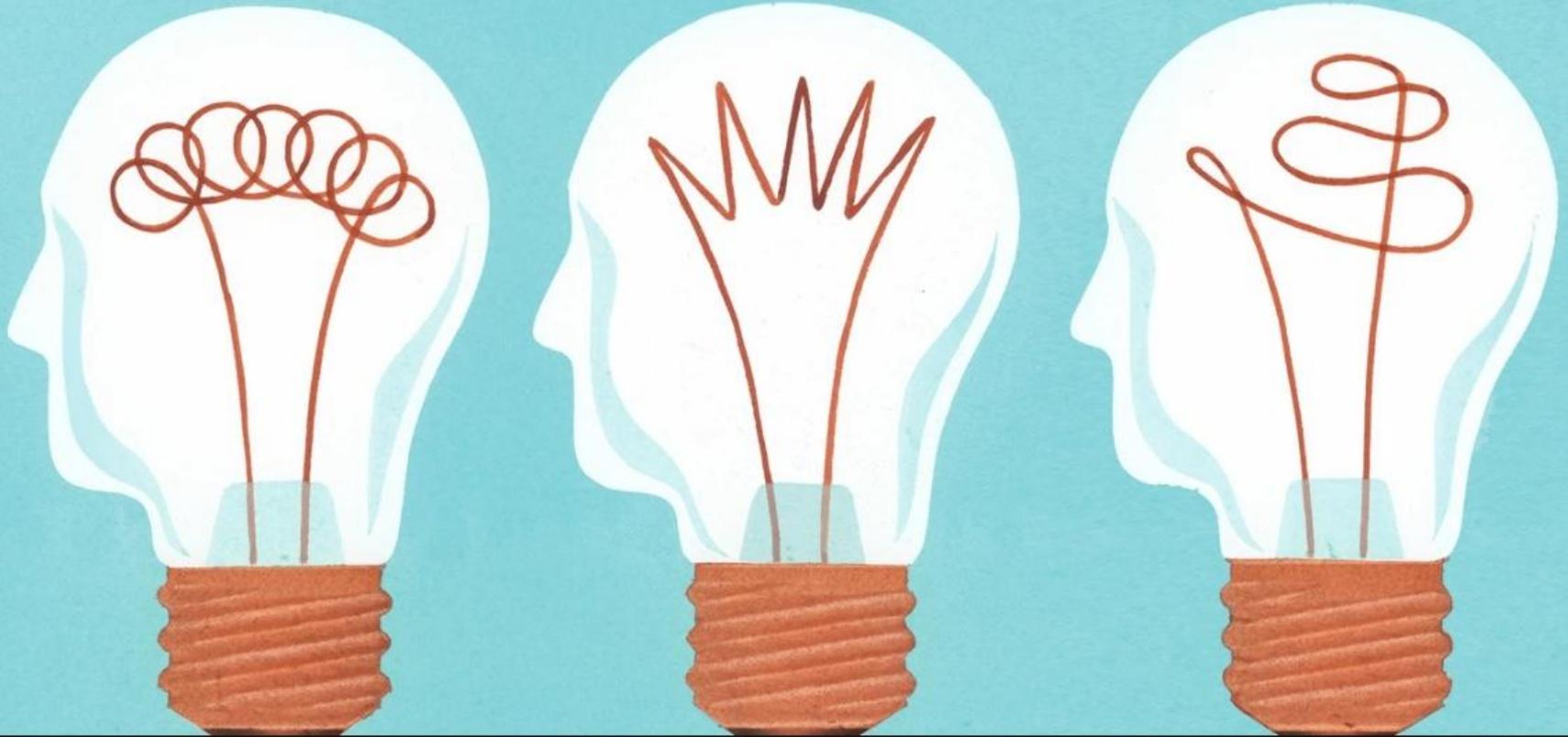


Applying Theory One: So All May Learn

Philippe Ernewein, MA

Director of Education, Denver Academy



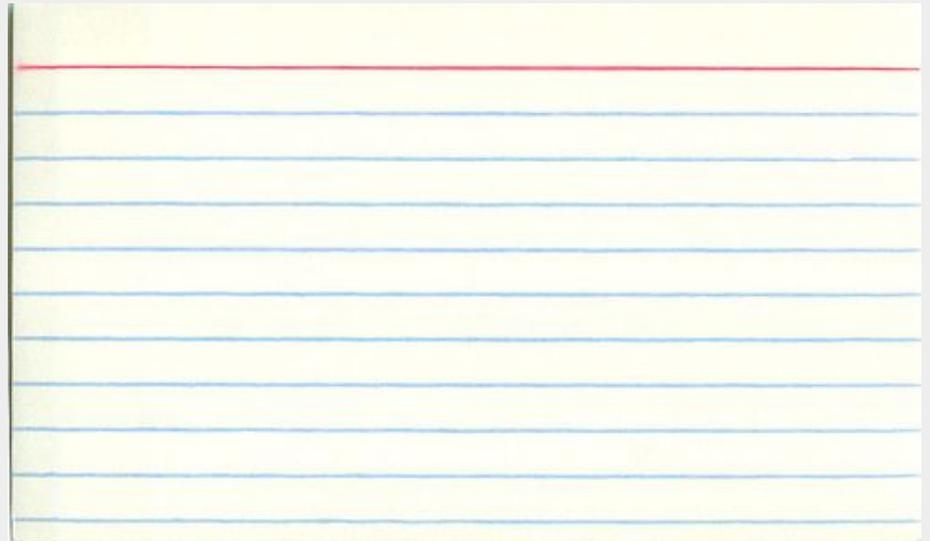
Please Consider:

When you think about your work as an:

- Advocate
- Teacher
- Administrator
- Parent

What is your guiding:

- Rule
- Theory
- Mantra



That you follow to make sure students are receiving the best education possible?



APPLY NOW

REQUEST INFO

GIVE TO DA

AN EDUCATION AS DISTINCTIVE AS YOUR CHILD

40+ YEARS OF INNOVATION

www.denveracademy.org

Philippe Ernewein

Teacher/Writer/Coach/Consultant/Student



HOME

VITAE

BLOG

VIDEOS

ARTICLES

TEACHING

WORKSHOPS

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PRESS



"It's not how smart you are,
it's how you are smart."

PechaKucha Video

Top 10 of 20 Years

Training Film

www.rememberit.org/ctr

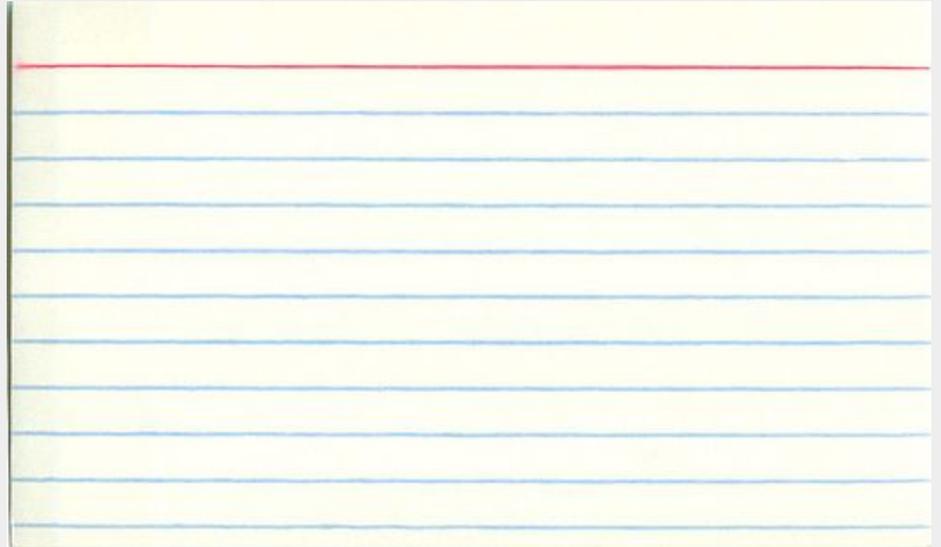
What did you write?

When you think about your work as an:

- Advocate
- Teacher
- Administrator
- Parent

What is your guiding:

- Rule
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- Mantra



That follow to make sure student are receiving the best education possible?

Objectives:

1. Learn about Theory One.
2. Design & apply Theory One to classroom, advocacy or parenting.
3. Address potential obstacles to implementation of Theory One.
4. Reflect on our own learning & what's best for our students.

Guiding Question

How are we supporting our students' best potential?

Mindset

All students can learn.

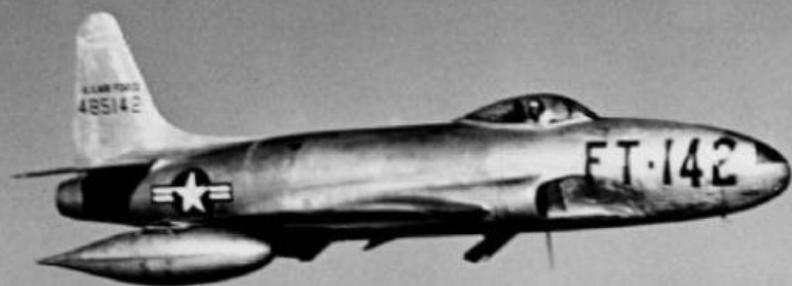
Students learn at different rates.

Students need different degrees of difficulty.

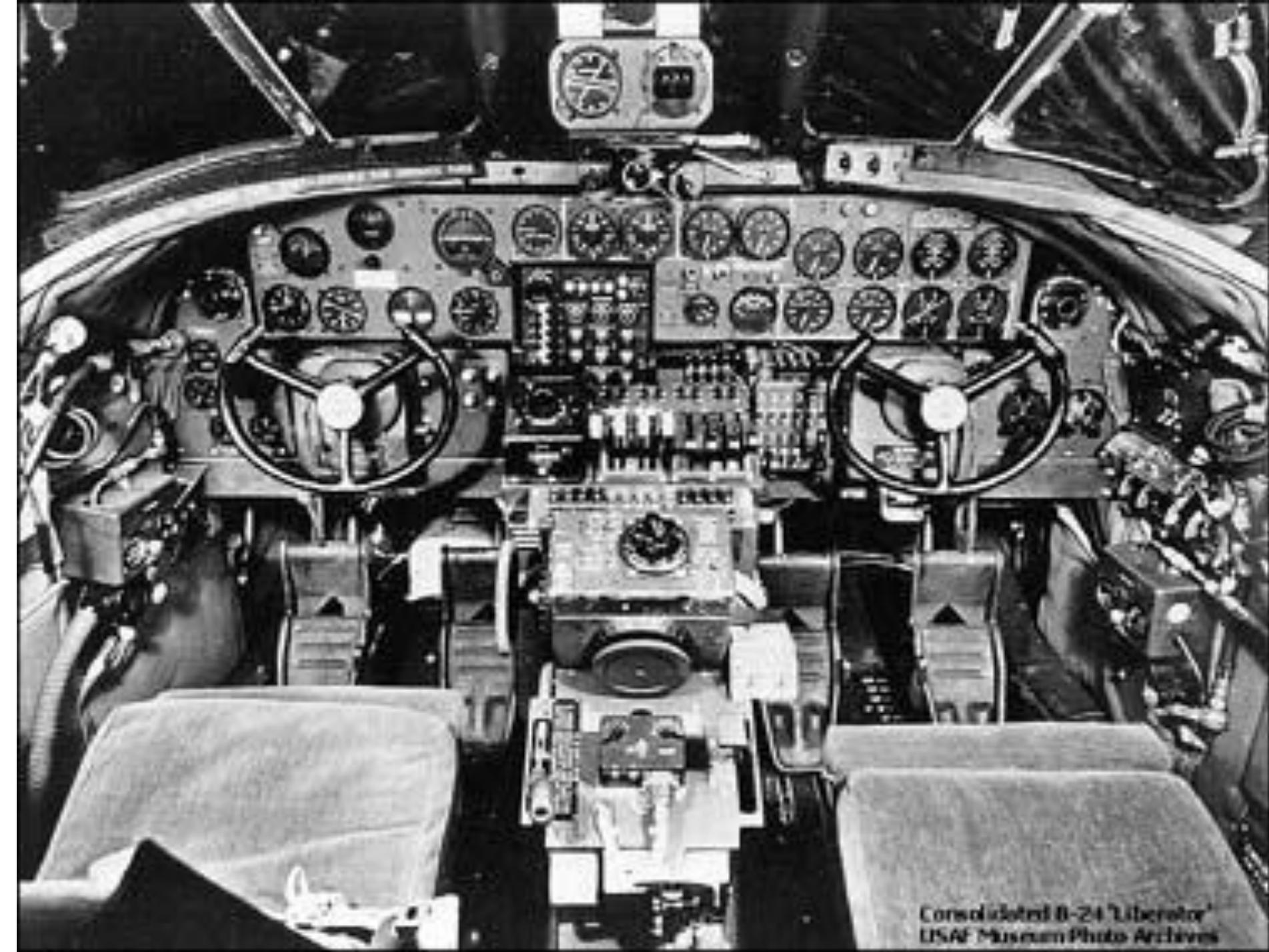
Students learn in different ways.

Students need different support systems.









Consolidated B-24 Liberator
USAF Museum Photo Archives



Wright-Patterson Air Force Base
Dayton, Ohio



height
shoulders
chest
waist
hips
legs
reach
torso
neck
thigh



height
shoulders
chest
waist
hips
legs
reach
torso
neck
thigh



How many pilots really were average?

Range of Average: 30%

5'7" ft

1,70 m

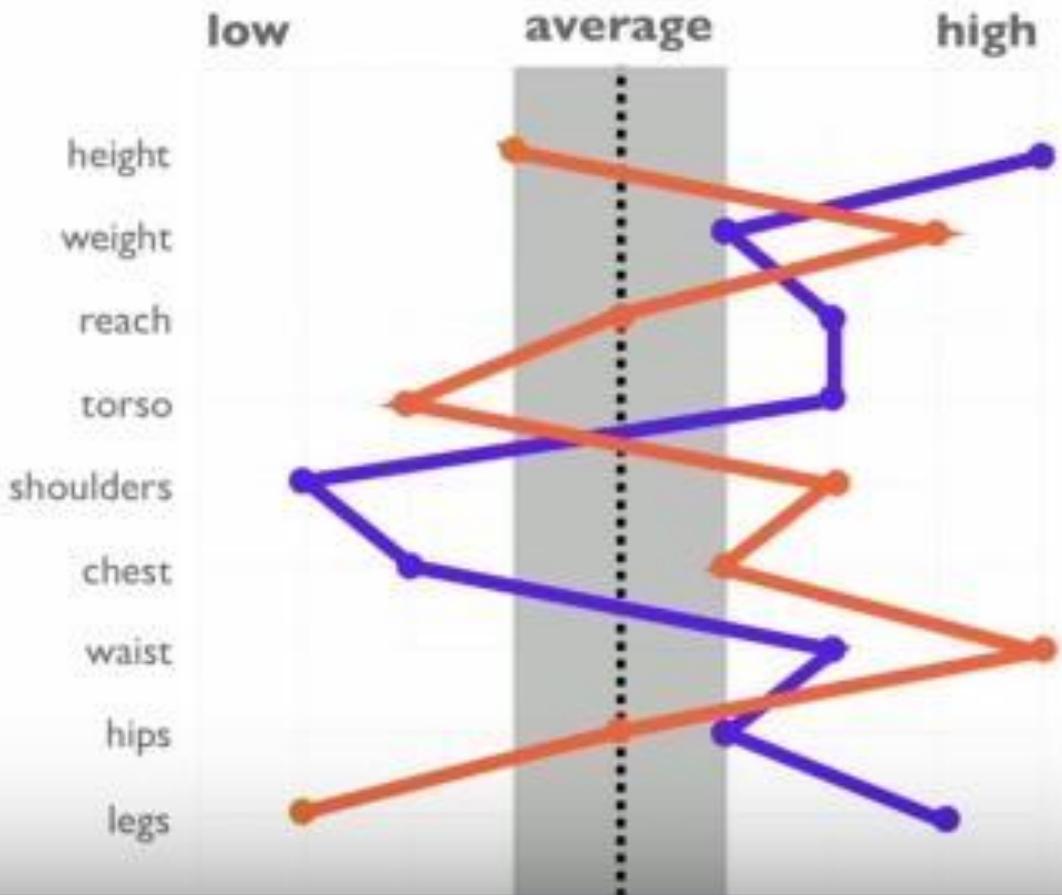
5'9" ft

1,75 m

5'11" ft

1,80 m









The Problem(s)

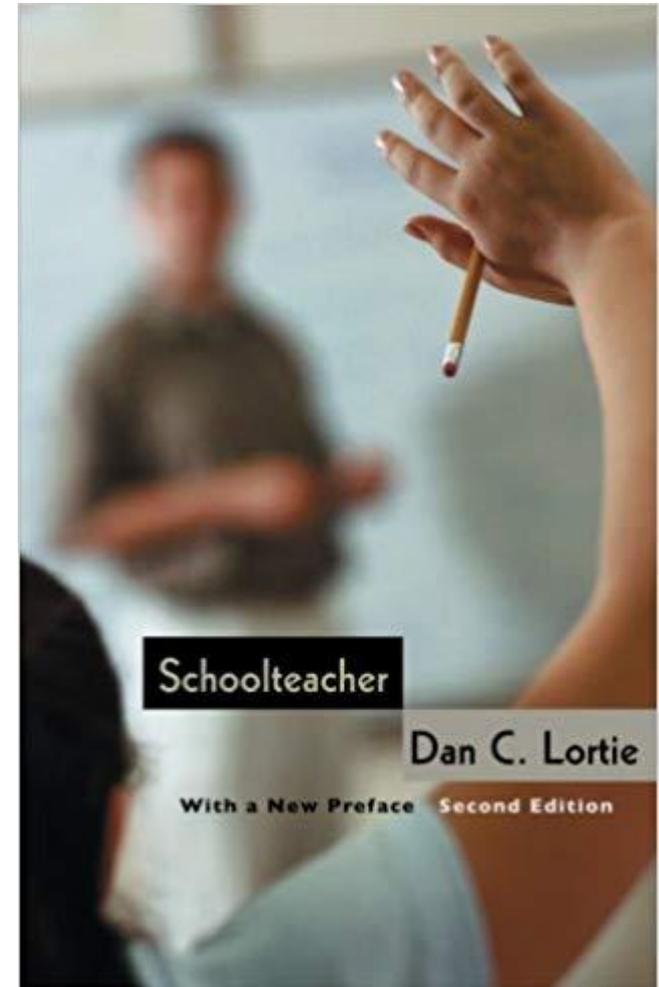
Educational institutions are designed to teach to the average.

Addressing “Apprenticeship of Observation”

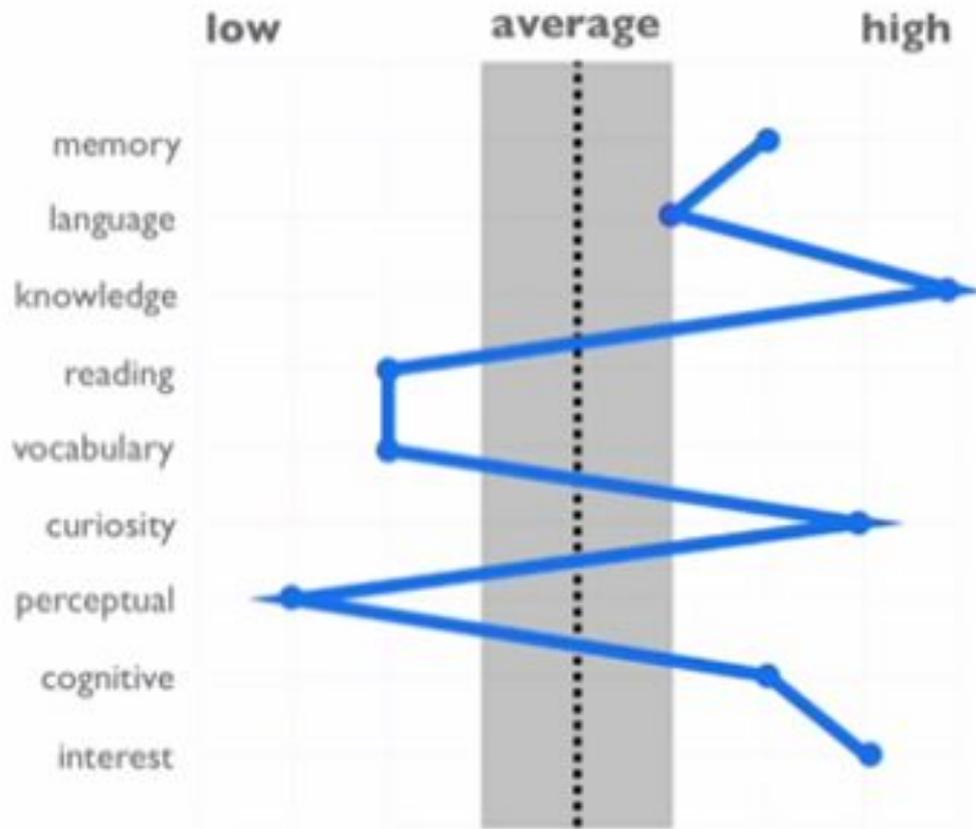


Dan Lortie: “Apprenticeship of Observation”

- Phenomenon of teachers arriving/participating in teacher training with thousands of hours a school children observing and evaluating professionals in action.
- This apprenticeship is largely responsible for many of the pre-conceptions that pre-service teachers hold about teaching.



Identifying the problem



Theory One

“People learn much of what they have a reasonable opportunity and motivation to learn.”

David Perkins, *Smart Schools* (45)

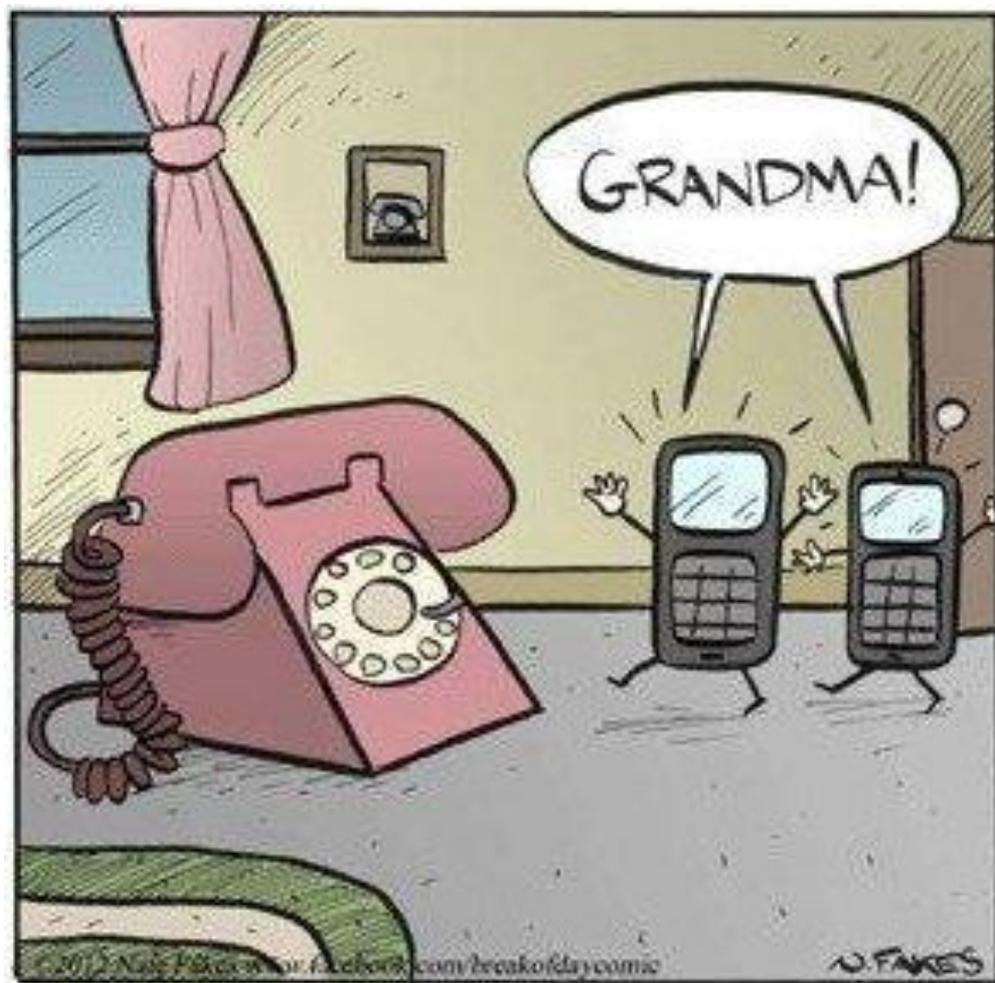
Theory One: two guiding principles

1. Learning is a consequence of thinking, and good thinking is learnable by all students.
2. Learning should include deep understanding, which involves the flexible, active use of knowledge.



Theory One: seven key principles

1. Generative knowledge
2. Learnable intelligence
3. Focus on understanding
4. Teaching for mastery & transfer
5. Learning-centered assessment
6. Embracing complexity
7. The school as a learning organization



Philosophy

Theory One

Process

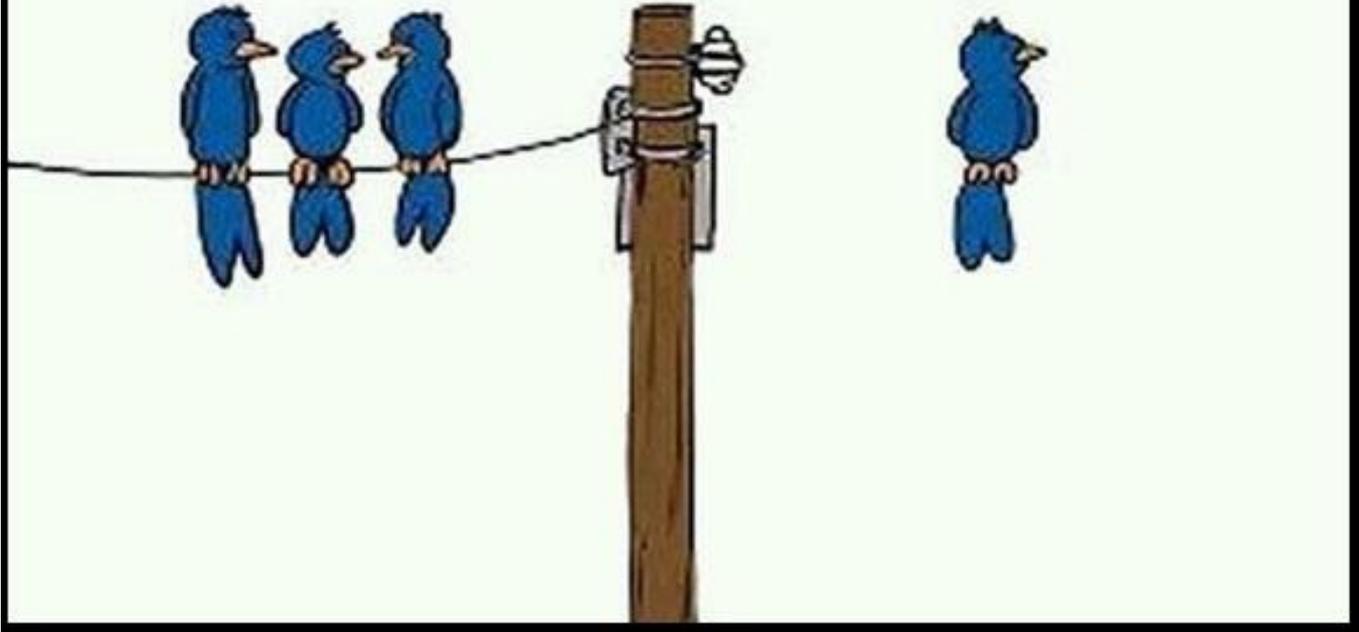
Journal

Product

PACE Project

3-Idea Link

He uses WiFi



Dear Reader,

Your notebook is a place for us to talk this year about books, reading, authors and writing. You'll be talking about literature in letters to me; I'll write a letter back to you within twenty four hours. All our letters will stay here together; arranged chronologically, as a record of the thinking, learning, and reading we did together.

In your letters talk to me about what you've read. Tell what you noticed. Tell what you thought and felt and why. Tell what you liked and didn't like and why. Tell how you read and why. Tell what these books said and meant to you. Ask questions and for help. And write back about ideas, feelings, experiences, and questions.

As a bare minimum for passing this course you must write at least one letter a week in your own literature journal. You may write as often as you wish. I promise to write back at least once a week.

When you write to me, put your journal in my mailbox near the homework trays. Again, your journal will be returned within twenty four hours. The only exception to this would be when a journal is turned in on Friday; then it will be return first thing Monday morning.

You may write letters and respond to letters both during and outside the reading workshop.

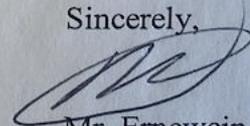
Please date your letters in the upper right-hand corner. Please number the pages of the notebook, as in a book. Please mention the title of the book you're talking about and, since the proper way to indicate the title of the book is to capitalize and underline it (e.g. Jay's Journal, To Kill a Mockingbird,) please capitalize and underline the titles of books to which you make reference.

Finally, enter the title and author of each book you finish this year on the log sheet that we will keep in the reading workshop section of our 3-ring binder. This record will serve as a quick reference.

Your collection of letters will provide one-fourth of your grade in the reading workshop. Follow the procedures outlined above, write often and a lot, and correspond about your thoughts on literature with involvement and care, and you'll do well.

I look forward to your letters.

Sincerely,



Mr. Ernewein

I really have nothing to say, except, "How." How
if possible that I get stuck with the people
honestly Don't like!!!! And.... Will never like!!!

ML • R & R Respect & Responsibility

- Concerned
- Mindful
- Thoughtful
- Ability to respond

DEAR JOSH,

ALTHOUGH THERE IS NO NAME TO BE FOUND,
I CAN ONLY ASSUME IT IS YOU.

FIRST OF ALL, YOU ARE AN AMAZING
WRITER. YOU EXPRESSED YOURSELF IN THAT LETTER
BETTER THAN ANYONE HAS EVER EXPRESSED

THEMSELF IN AN OPENING LETTER.

... about many things without

Ok... Ok... there are a few kids that I do get along with. (I'll admit that much!) But I just can not deal with these kids. The first day of school I couldn't wait until I found out whos class I was going to be in! I can remember that someone told me that I was in your class, so I was like, "ok thats good." As I walk up the ramp to the room my head was filled with thoughts of who I will see and what people are ~~going to~~ ^{going to be} in class for. So I walk in and ~~as~~ as I was looking for a desk I realize that there are NO GIRLS IN THE ~~the~~ WHOLE CLASS!!!! it was all guys. So I stated thinking, "NADA I bet most of these kids are just visiting from another class room and that there is no way they would make up a class with all guys! Why would they make a class up of all guys!!!"

#2

9/5

Ok ummmm, This past week has been
verey verey over wellfiring and hard to
get threw. I dont know if I am
going to make it threw the year! every
day just seems to get wers and wers. I'm
fighting more with my mom and I really
dont know why. There have been oeding
more along with the class, ^{and} lunch is
really not that bad. I guess its just
me but I really want to pass
the test to get off-campus lunch.
As I look up I see the word

Video on the board and I
really want to see that simson thing.

Josh F.

DEAR FRISBIE,

YOU WILL GET THROUGH THE YEAR, BUT YOU MUST TRULY BELIEVE THAT YOU WILL MAKE IT THROUGH THE YEAR. I KNOW YOU CAN.

YOU ARE AN INCREDIBLY SMART YOUNG MAN AND I'M SURE THE NEXT (FIRST REALLY) BIG PROJECT IN THIS CLASS WILL SHOW THAT.

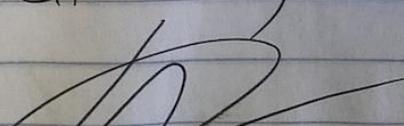
I'LL INTRODUCE IT TOMORROW AND SHOW YOU EXAMPLES OF PREVIOUS STUDENT WORK.

THE NEW RHCP ALBUM IS SOLID, BUT COMPARED TO OTHER ALBUMS, MOTHER'S MILK + BLOOD SUGAR SEX MAGIC, A BIT SOFTER. MAYBE I'M GETTING OLDER. ACTUALLY I'M ABOUT AS OLD AS MOST OF THE GUYS IN THAT BAND.

DID YOU LOSE MY COOL PUNK ROCK BOOK? LET ME KNOW OR GET ANOTHER BOOK.

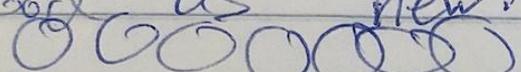
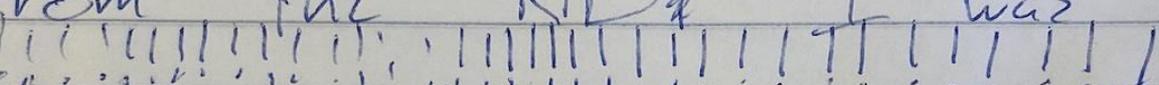
I'LL BURN THE NEW RED HOT AS SOON AS I CAN.

SINCERELY



This past week has gone really good. The
Book IKYTCBS is ^{vid} getting good. Oh
My knee is not 100% but I ~~can~~ have
~~skate~~ skating on it. It seems that the
less I skate the better I get!!! Its really
weird. Its like every time I take a few
week or days off when I come back Im
grat. I love skating. Oh on tuesday I
~~went~~ went to this school near me to skate and
I havent bin there in a long time. At the
School there are these metle benches. I can
do so many new trick on them. Its right
to day I going to that ~~open~~
park and I meet my firends ~~there~~
She is going to take me up to fort edens
I guess a new park just opened so I
going to go check it out. me and my
friends are making this vidio and I just
found the music for my part. I ~~was~~
can that song Magic Carpet ~~vid~~

Hi! Its me "gimpo" I can walk my knee
is \$000000 screwed. Well its not really
my knee but more like under it. It all
happend on Sunday after a full day
of skating. I was trying to do this
big gap thing when I got to much
speed and over shot. I landed on the
flat bottom. When I got up my legs were
shaking like crazy. ~~my~~ my godd it
hurt. At first I thought that it would
just be ok and that I could just
walk it off. But every time I stood
~~on it~~ The thing was that both
knee were hurting so I thought it was
just ~~so~~ sore. ~~like~~ Well ~~the~~ now is
Thursday and I feel a hole lot better

~~on~~ ~~the~~ ~~thing~~ ~~was~~ ~~that~~ ~~both~~
knee were hurting so I thought it was
just ~~sore~~ sore. ~~well~~ Well ~~the~~ ~~was~~ ~~now~~ ~~is~~
Thursday and I feel a hole lot better
I guess I just really broozed my knee
joint. I bet by next wends day I'll
be good as new!! or at lest I hope
so.  my mom got my
wallet from the RD ~~the~~ I was so
happy 
last night chapter was really good.

DEAR JOSH (AKA FEISBIE),



I ENJOYED LUNCH YESTERDAY; I THINK WE COULD TALK FOR A LONG TIME ABOUT MUSIC. THIS WEEKEND I PLAN TO HOOK-UP MY COMPUTER & BURN CDS. I LOVE TO BURN CDS. WHEN I WAS YOUR AGE I USED TO CREAT MIX TAPES WITH MY DOUBLE DECK CASSETTE RECORDER. O.K., THAT WAS IN THE DAYS OF VINYL & RECORDS.

IF YOU LIKE CHAPTERS 7+8, I BET YOU FOUND CHAPTER 9 GOOD TOO. SIMON ON THE BEACH. WHAT REALLY DID HAPPEN? WE'LL TALK ABOUT IT IN CLASS TODAY.

HOPEFULLY YOUR KNEE IS 100%.
CHECK OUT FUKAZI ON YOUR MUSIC INTERNET SITE.

SINCERELY,

JOSH, I APPRECIATE THE TIME YOU GAVE ME
ON THE PHONE LAST NIGHT. I VALUE YOUR
CONCERN AND I HOPE YOU REALIZE I WILL
MAKE CHANGES WHEN I CAN.

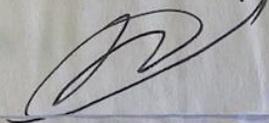
I LOOK FORWARD TO THE WRITING YOU WILL
DO. YOU ARE A TALENTED & SMART YOUNG MAN.

WHAT ARE YOUR THOUGHTS ON TALES OF PUNK
ROCK NOTHING SO FAR? IT IS A TRUE
STORY ABOUT THE MUSIC COMING OUT OF
WASHINGTON D.C. AREA IN THE LATE 1980S.

BANDS LIKE FUGAZI, DAG-NASTY, AND MINOR THREAT.
HAVE YOU HEARD OF THEM?

LET ME KNOW.

SINCERELY



DEAR JOSH (AKA FEISBIE),

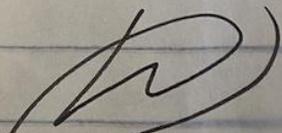
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HOPEFULLY YOUR KNEE IS 100%.

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SINCERELY,



Dear E

May 10, 2003

This suck my computer is slowly breaking. Something is going on and I don't know what the hell is going on.

Any way I really excited for this trip that's coming up with ~~satellite~~ satellite. I can't wait to get away for a while and just stop the helpless stress. I really feel that this trip will help me finish out the year strong. God I can't wait. It's in nearly a week. I'm so pumped. I was thinking of doing a WWI on the hole tripe like I would keep a journal or book how every day was like. I think it would be like a long story. Like every day would be a chapter or there were any events and stuff.

Tell me what you think

Thanks.

Theory One

“People learn much of what they have a reasonable opportunity and motivation to learn.”

David Perkins, Smart Schools (45)

1. Learning is a consequence of thinking, and good thinking is learnable by all students.
2. Learning should include deep understanding, which involves the flexible, active use of knowledge.

Theory One: seven key principles

1. Generative knowledge
2. Learnable intelligence
3. Focus on understanding
4. Teaching for mastery & transfer
5. Learning-centered assessment
6. Embracing complexity
7. The school as a learning organization

Philosophy

Theory One

Process

Journal

Product

PACE Project

3-Idea Link

PACE Project: *starter kit*

| <u>Process</u> | <u>Audience</u> | <u>Connection</u> | <u>Expression</u> |
|--|------------------------|--------------------------|---|
| Knowledge: <i>name, define, recall, list, report, narrate, recognize, describe, draw.</i> | Self/Friends | Write/Create Blog | Linguistic: <i>write a poem, myth, legend; invent slogan for; write a journal.</i> |
| Comprehension: <i>review, summarize, discuss, explain, paraphrase, restate, locate, tell, express, report.</i> | Family | Post on YouTube | Logical/Quantitative: <i>translate into mathematical formula; represent through graphic organizer; create a timeline of</i> |
| Application: <i>illustrate, apply, make, interview, translate, operate, show, interpret, practice, model, demonstrate.</i> | School | Email Letter | Kinesthetic: <i>rehearse/perform a play on; role-play/simulate; build/construct a model of; design a product for.</i> |
| Analysis: <i>diagram, compare, contrast, deduce, order, outline, disassemble, teach.</i> | Community | Enter Contest | Spatial: <i>chart, map, cluster, or graph; sculpt; draw; paint; create a mural.</i> |
| Synthesis: <i>combine, predict, systematize, connect, infer, extend, plan, propose, design.</i> | Country | Design Website | Musical: <i>write song lyrics; explain how musical lyrics relate; create short musical on.</i> |
| Evaluation: <i>judge, interpret, criticize, imply, conclude, decode, measure, rate.</i> | Global | Create Podcast | Interpersonal: <i>conduct a class meeting that; assume role to; participate in a service project.</i> |
| Create: <i>design, assemble, construct, conjecture, develop, formulate.</i> | Combination | Combination | Intrapersonal: <i>self-assess; receive feedback; describe your values about.</i> |

| <u>Written Component</u> | <u>Presentation</u> |
|---|--|
| <i>Following the writing process (draft 1, draft 2, rewrite, finalize), each student is required to compose an essay: thesis/focus statement in the first paragraph, two supporting quotes for each paragraph in the body of the essay, and conclusion.</i> | At the conclusion of the project each student has the opportunity to share their learning (5-8 minutes) using the following guidelines: use handout or visual, share thesis, support, connection, and exit slip/assessment tool. |

At the Core of Differentiated Instruction...

Student Traits

- Readiness Level
- Interest
- Learning Profile
- Affect

Classroom Elements

- Content
- Process
- Product
- Learning Environment

PACE Project Steps



Identify

-Diagnostic learning profile, learning modalities, personality inventory, MI survey, formative assessment, exit slips.

Facilitate

-Dedicate classroom workshop time, offer examples, conduct conferences, environmental structure.

Celebrate

-Create ongoing opportunities for students to share process and final products.

Math & Science Projects



- Stairs Project: slope, equation of a line
- Cookie Project: multi-step equations, point of equilibrium, TOV
- Postcard Project: estimating profit, price-setting, supply & demand, equations
- Mural Project: scale, ratios, proportions

The Cookie Project: Systems of Equations



- “You bring the cookies, I’ll bring the milk!”
 - **Goal:** To determine the expense of making cookies and decide on an appropriate selling price in an effort to make a profit.

| | |
|---|--|
| Math: calculations, solutions, mistakes | Cookies & Recipe |
| Essay: drafts, evidence of self-edits, conferences | TI-83 Calculator & Graphing Paper |
| Presentation: hand-outs, examples | Presentation Folder |

Math Part: Finances



- **Cost Equation:**
 - Calculate the cost of the ingredients in one batch of cookies
 - Variable: receipt versus actual ingredients used
- **Profit Equation:**
 - Research a reasonable price for selling individual cookies
 - Think about quality versus quantity
- **Analyzing Data:**
 - Create a table & graph to model cost and profit
 - Illustrate the point at which you would make profit
 - Create a handout that shows this data

Written Part: Mixing the Ingredients



- Write a report (at least 3 paragraphs) about your capitalistic cookie adventure.
- Keep the following questions in mind:
 - What decisions did you make concerning ingredients, labor, costs and pricing?
 - How could you market this product outside the classroom?
 - How and why do manufacturer's prices differ from yours?
 - Consult friends, family, and foes regarding price; how much would they be willing to pay?

Presentation: Milk & Cookies



- Presentation Day
 - Business attire
 - Hand-outs & visuals
 - Cookies for all students
 - Write, solve & graph equation
 - Self-evaluation

Theory One

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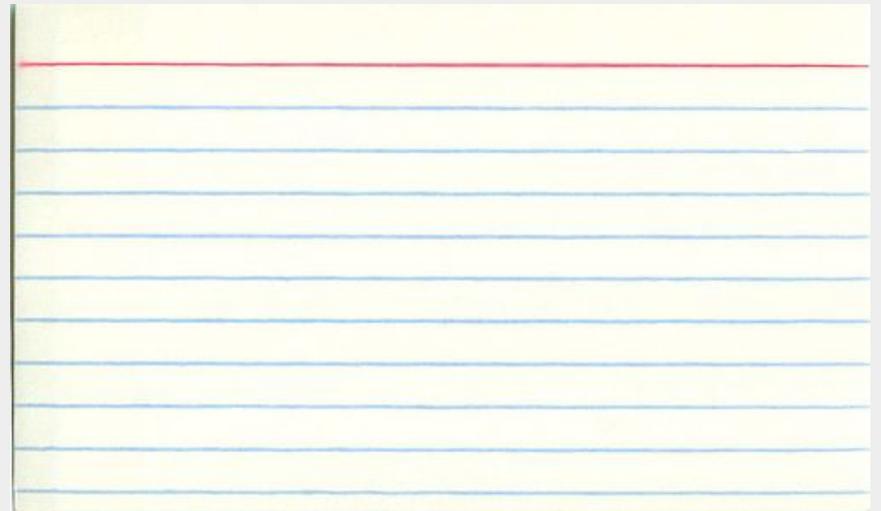
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Reflection & Questions

1. What can you bring back to your classrooms, homes, advocacy?
2. What questions or concerns do you have?



National Center For Learning Disabilities (NCLD):
State of Learning Disabilities Report (May 2017)



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1. 48 percent of parents believe incorrectly that children will outgrow these brain-based difficulties

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2. 33 percent of educators say that sometimes what people call a learning disability is really just laziness

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1. 48 percent of parents believe incorrectly that children will outgrow these brain-based difficulties
2. 33 percent of educators say that sometimes what people call a learning disability is really just laziness
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4. Learning disabilities is the largest of the 13 disability categories covered under special education law
5. A third of students with LD have repeated a grade, which increases the risk of dropping out.
6. Students with disabilities are more than twice as likely to be suspended as those without disabilities
7. More than half (55 percent) of young adults with LD have been involved with the justice system.

LOOK, IT'S ALMOST
11 O'CLOCK!



WOW, THE LAST TWO
HOURS REALLY FLEW BY!



I HOPE THE TEACHER
DIDN'T SAY ANYTHING
IMPORTANT.



WIESEN

Suggested Reading

1. Dyslexia Focused

- a. Dr. Sally Shaywitz's *Overcoming Dyslexia: A New and Complete Science-Based Program for Reading Problems at Any Level*
- b. Dr. Maryanne Wolf's *Proust & the Squid: The Story and Science of the Reading Brain*
- c. Brock & Fernet Eide's *The Dyslexic Advantage: Unlocking the Hidden Potential of the Dyslexic Brain*

2. Parenting

- a. Dr. Robert Brooks' & Dr. Sam Goldstein's *Raising Resilient Children: Fostering Strength, Hope, and Optimism in Your Child*
- b. Wendy Mogel's *Voice Lessons for Parents: What to Say, How to Say it, and When to Listen*

3. Good Reads

- a. Andrew Solomon's *Far From the Tree: Parents, Children and the Search for Identity*
- b. Malcolm Gladwell's *David and Goliath: Underdogs, Misfits, and the Art of Battling Giants*

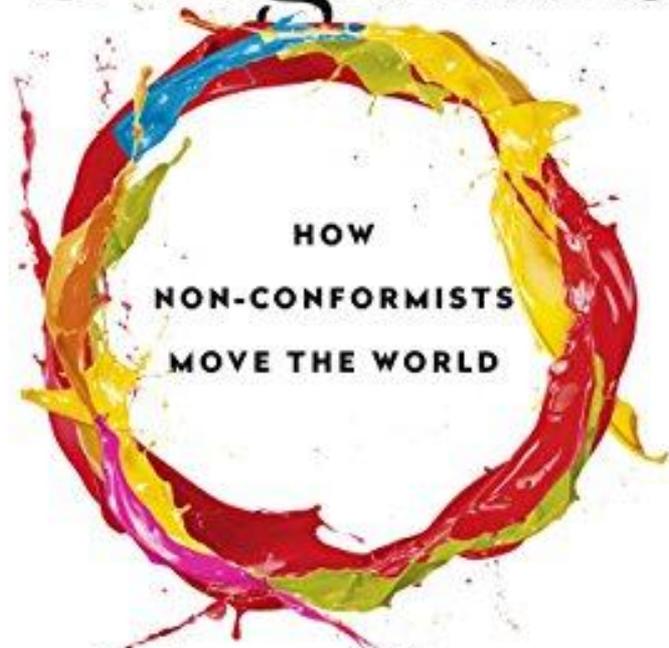
4. Academic Stuff:

- a. Dan Lortie's *Schoolteacher: A Sociological Study*
- b. Adam Cohen's *Imbeciles: The Supreme Court, American Eugenics, and the Sterilization of Carrie Buck*
- c. Lynn Meltzer's *Promoting Executive Function in the Classroom (What Works for Special-Needs Learners)*

#1 NEW YORK TIMES BESTSELLER

"An insightful, wonderfully new take on the world from one of my favorite thinkers." —MALCOLM GLADWELL

Originals



HOW
NON-CONFORMISTS
MOVE THE WORLD

Adam Grant

author of *Give and Take*

Foreword by SHERYL SANDBERG



READER, COME HOME



The Reading Brain in
a Digital World

MARYANNE WOLF

Author of *Proust and the Squid*

make it stick



The Science of Successful Learning

Peter C. Brown

Henry L. Roediger III

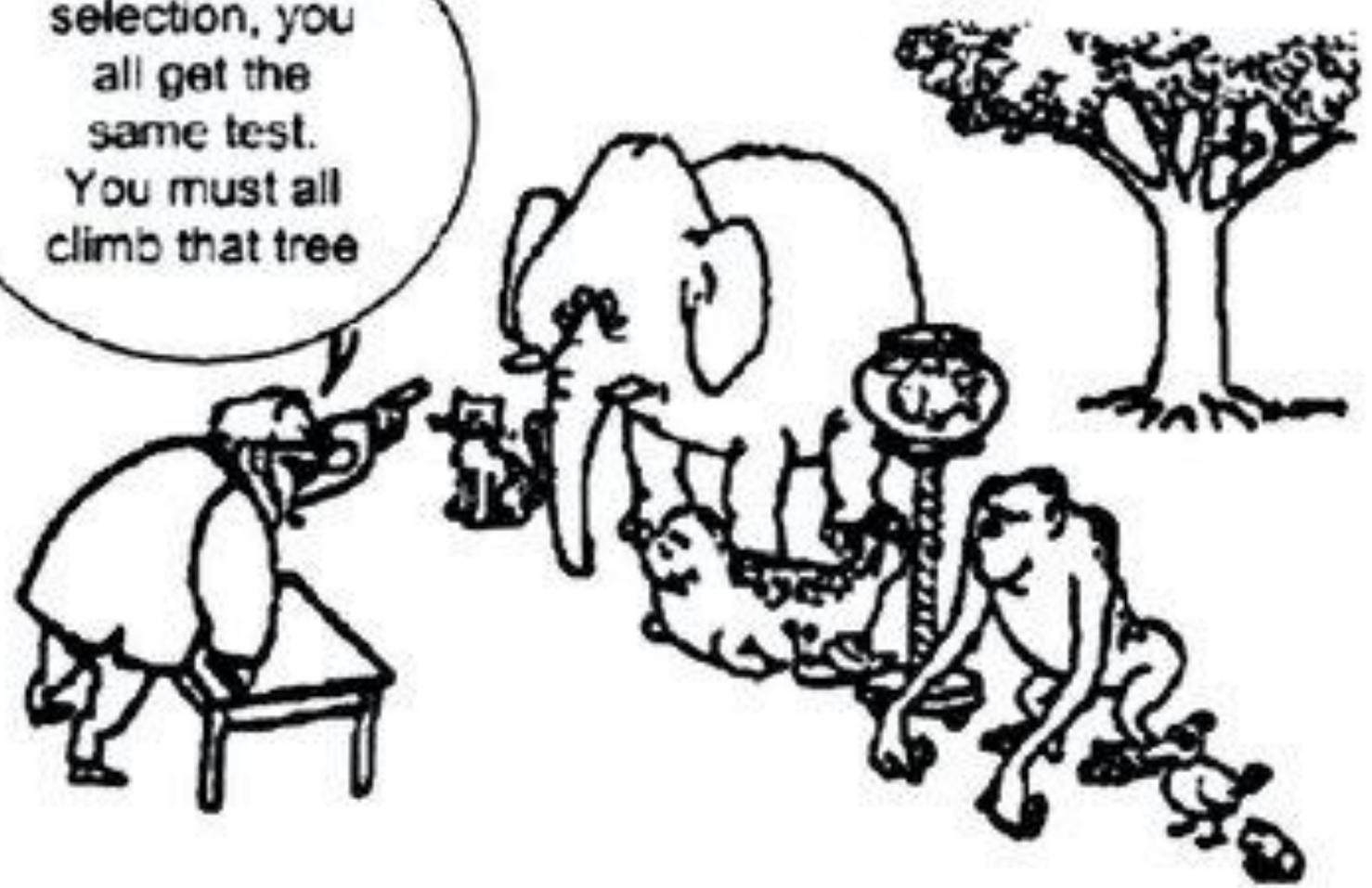
Mark A. McDaniel

Digital Resources

1. www.understood.org
 - a. Our goal is to help the millions of parents whose children, ages 3–20, are struggling with learning and attention issues. We want to empower them to understand their children’s issues and relate to their experiences.
2. <http://dyslexiahelp.umich.edu/>
 - a. A clinical tool designed for healthcare professionals to help them gain a better understanding of learning disabilities to be used in their practice.
3. <http://med.stanford.edu/neurodiversity.html>
 - a. Our goal is to draw from people with a variety of backgrounds and life experiences to reach a new level of innovation in teaching, research and caring for patients. Innovative programs ensure diversity is reflected in our programs, culture and leadership.
4. <https://youtu.be/4eBmyttcfU4>
 - a. High school dropout turned Harvard faculty talks about how a simple new way of thinking helps nurture individual potential. Todd Rose is the author of the *End of Average*.

What did we learn?

To ensure a fair selection, you all get the same test. You must all climb that tree



Implications of “Apprenticeship of Observation”

“The average student has spent 13,000 hours in direct contact with classroom teachers by the time they graduate from high school (61).”

