

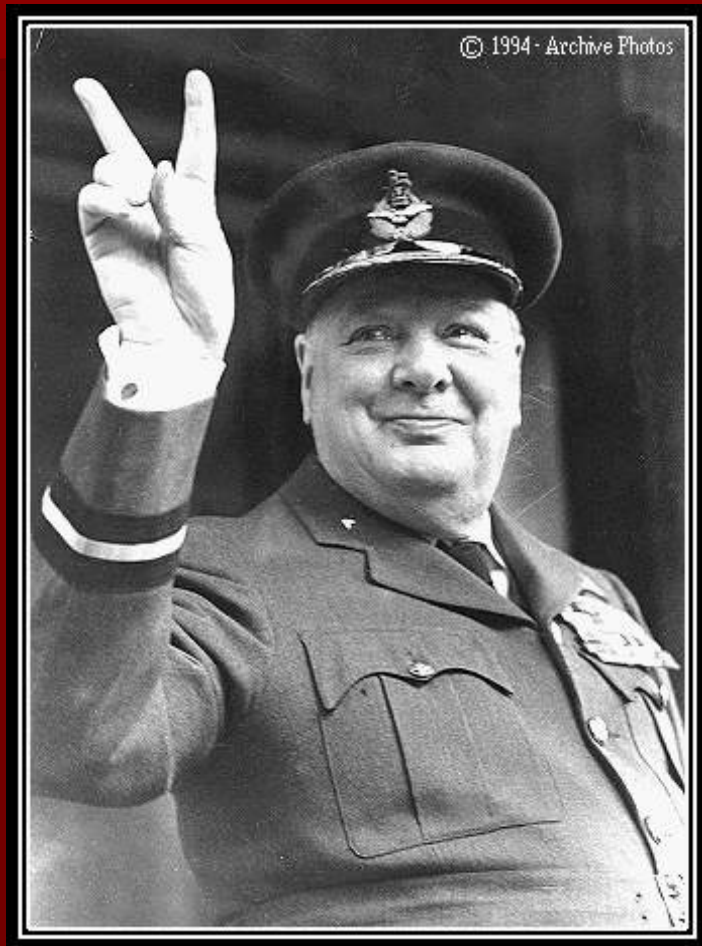
Mindset

*Source for selected PPT content: Centre for
Confidence & Well Being, Scotland*

Are people
born smart?



Churchill



Winston Churchill
REPEATED a grade
during elementary
school.

He was placed in the
LOWEST division of
the **LOWEST** class.

Beethoven

Beethoven's teacher
called him a
HOPELESS
composer.

He wrote **5** of his
greatest
SYMPHONIES while
DEAF.



Tolstoy



Leo Tolstoy **dropped**
out of college.

He was described as
both "**UNABLE** and
unwilling to **LEARN.**"

Role models

....**Einstein's** teacher said that he was
"academically subnormal."

....**Michael Jordan's** coach said that he
"wasn't more talented than other people."

.....**Walt Disney** was told that he lacked
"creative imagination."



So... if those people weren't always as amazing as me, what happened?

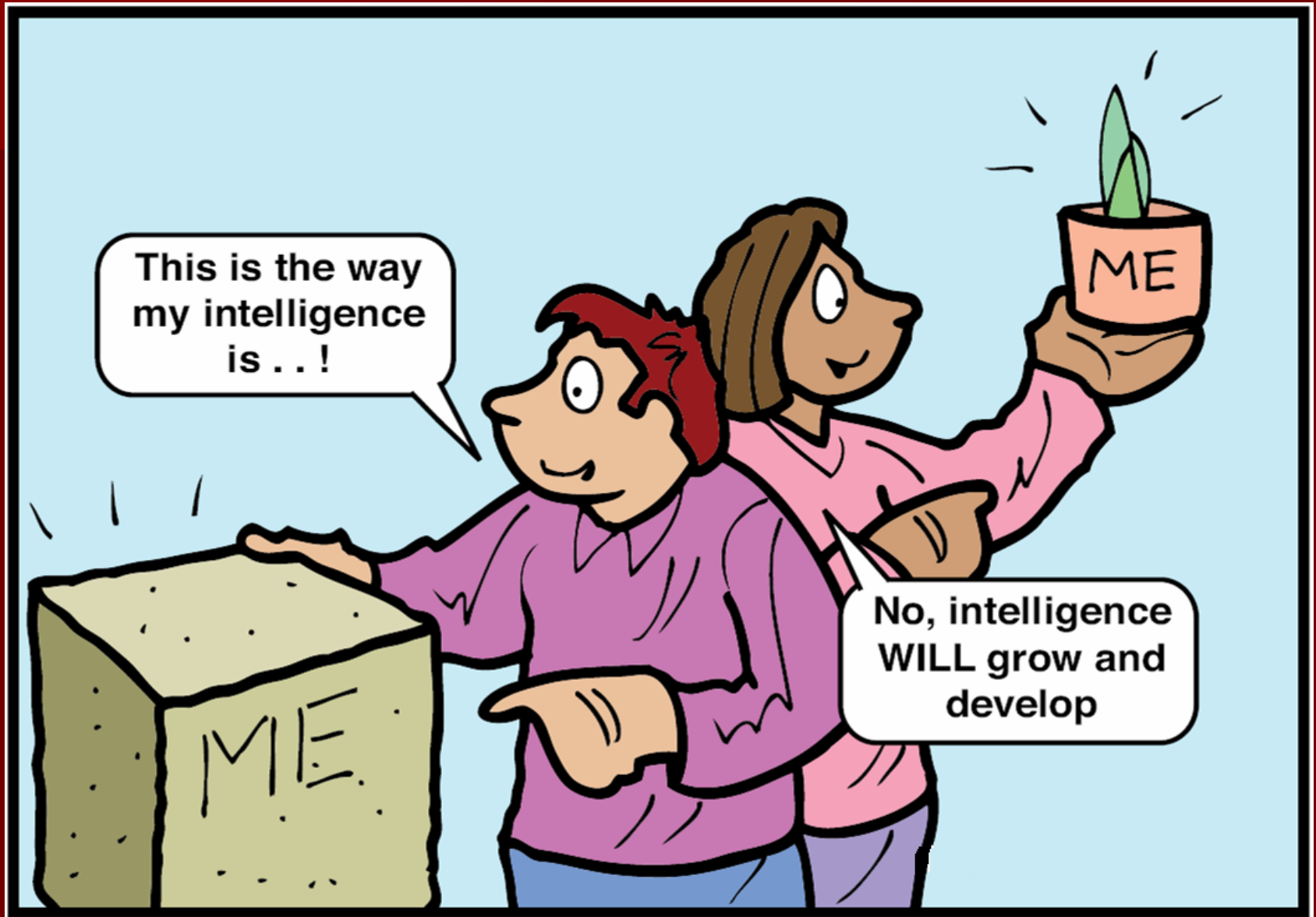
The Growth Mindset:

Intelligence is a malleable
quality to be developed

“I don't divide the world into weak and strong or successes and failures. I divide the world into learners and non-learners.”

~ Benjamin Barber

Two mindsets



Mindset

the research of Carol S. Dweck, Ph.D.

- Belief about ability
- Affects decisions related to learning
- **Fixed** mindset – intelligence is a fixed trait
- **Growth** mindset – intelligence can be trained; the brain is a “growth organ”

Talent is a *starting point*.



Challenge Time!
Who is this man?



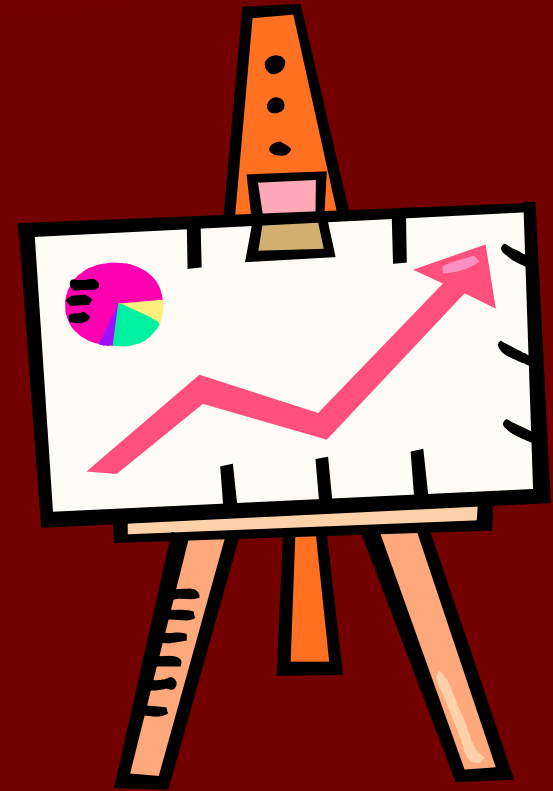
Alfred Binet

Mindset Rules

- Fixed Mindset:
 - Look smart at all costs.
- Growth Mindset:
 - Learn, learn, learn!

Dweck's Research:

- Transition to 7th grade
 - Work gets harder, kids begin to struggle
- Assessed whether students with identical achievement scores at the beginning of 7th grade had fixed or growth mindsets
- Fixed mindset students were focused on grades. Growth mindset students said learning was more important than getting good grades.
- Math grades rose dramatically in the growth mindset group as compared to the fixed mindset group.



Mindset Rules

■ Fixed Mindset:

–It should come naturally. If I have to work hard, I'm not very smart.

■ Growth Mindset:

–Work hard. Effort is key!

Dweck's Research:



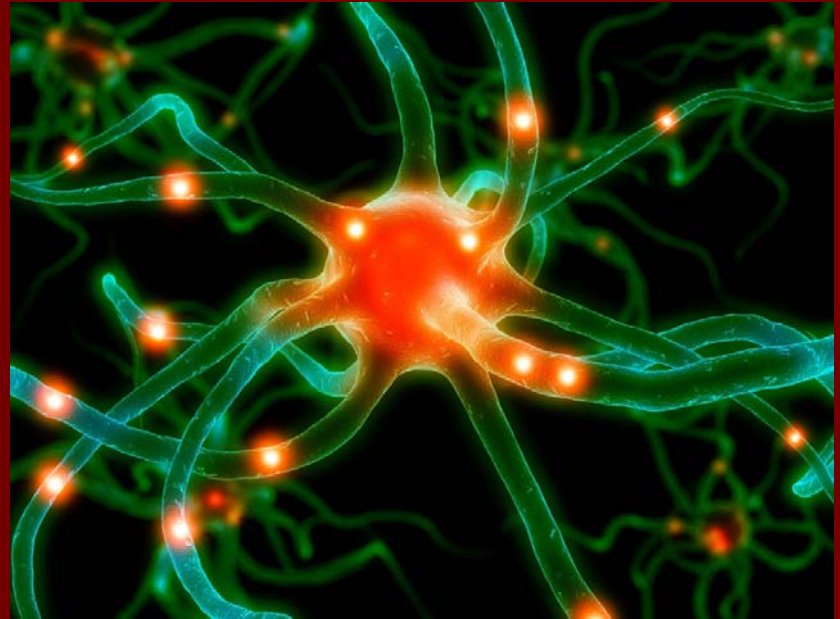
- Pre-Med students
- Fixed mindset students thought that their ability would carry them along; if they did poorly, they lost confidence.
- Growth mindset students were concerned about learning the material; if they did poorly, they worked harder.
- Growth mindset students had higher final grades in organic chemistry, the most difficult course in the sequence.

Mindset Rules

- Fixed Mindset:
 - Hide mistakes and conceal deficiencies.
- Growth Mindset:
 - Confront deficiencies.
 - Capitalize on mistakes.

Dweck's Research:

- 4th grade students were tested in a lab with electrode cap to measure brain activity.
- Students were asked a series of challenging questions on a computer.
- After answering, they waited a second to see if they got the answer right or wrong. After another second, they learned what the correct answer was.
- Fixed mindset students' brainwaves indicated stronger attention on being right or wrong.
- Growth mindset students' brainwaves indicated stronger attention on the correct answer.



Goals: performance

- Those with a **FIXED MINDSET** tend to create **PERFORMANCE** goals.
- They believe that a person's **POTENTIAL** can be **MEASURED**. They aim to receive validation from others.
- Receiving low marks mean that they are not smart.
- Both success and failure cause **ANXIETY**.

Goals: learning

- Those with a growth mindset tend to create **LEARNING** goals.
- The goal is **MASTERY** and **COMPETENCE**.
- Scores and marks reflect how people are doing **NOW** and do not measure a person's potential.
- Creating goals for learning has shown to **INCREASE PERFORMANCE** and enjoyment and decrease negative emotion.

Recovering from Failure

- Fixed mindset students have no recipe for recovering from failure, and instead tend to:
 - Give up
 - Blame others or circumstances
 - Try to feel superior in some other way

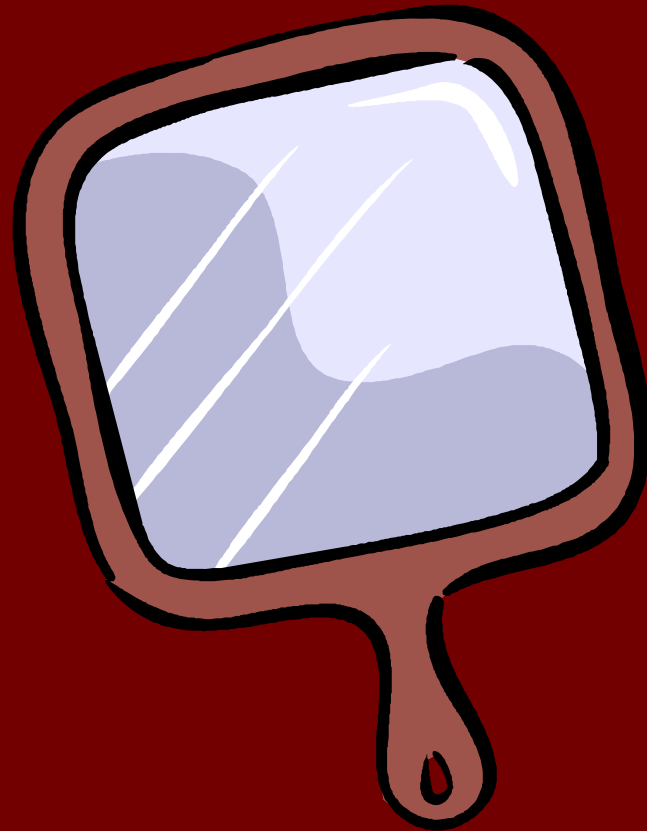


Challenge Time!
Who is this man?



John McEnroe

Where do mindsets come from?



Our words tell students what we believe
and what we value.

Praise

- Praising intelligence makes kids fragile.
 - “Wow, you’re really smart!”
 - “Look at how well you did on this project. You are so intelligent!”
- Our tendency to praise gifted children for their intelligence may actually be detrimental to their long-term intellectual growth and development.

Dweck's Findings



- Students praised for intelligence:
 - Selected easier tasks when given choice
 - Lied about their scores in an effort to look "smart"

The Alternative: Praise Effort!

- "You must have tried very hard!"
- "I love that you kept trying, even when it got difficult! Good job!"
- "You got an A without working? That's nice, but you must not be learning much. I'm sorry I wasted your time. Let's do something that you can learn from!"

Dweck's Findings

- Students who were praised for effort:
 - Overwhelmingly (90%) chose more challenging tasks
 - Showed higher levels of engagement and achievement



What to Praise

- Effort
- Struggle
- Applying strategies
- Selecting difficult tasks
- Learning
- Improvement
- Persistence in the face of setbacks



Effort

- Those with a **fixed mindset** view effort as a **reflection** of **low intelligence**.
- Those with a **growth mindset** see effort as a necessary part of **success**.
- Hard work means 'I don't get it' or 'I'm unintelligent'
- They **try harder** when faced with a setback.
- Effort = lack of ability
- Effort = success.
- They use effort to **overcome** difficulty.

Effort

- People were asked about intelligence and how much they thought it was due to effort and how much they thought it was about ability

Intelligence = _____% effort _____% ability

- Fixed = 35% effort vs. 65% ability
- Growth = 65% effort vs. 35% ability

Effort: mindset



Strategies: growth mindset

- People adopting a growth mindset tend to generate other, and new, ways to do things.
- If one route doesn't work, they will try others.
- They will think "outside of the box" to solve problems because they believe that they can.

Strategies: fixed mindset

- Carol Dweck has found that students with a fixed mindset keep using the wrong strategy when faced with a problem.
- Then, they disengage from the problem.
- Finally, they give up.

Implications for Instruction

- Growth mindset can be taught.
 - Students need to know that the brain can stretch and grow like a muscle. They can get smarter!
- Giftedness can be cultivated.
 - Students need to be exposed to circumstances where talents can flourish.
- Lessons must require effort and challenge.
 - Those who excel make deliberate efforts and systematically address weaknesses; push themselves beyond the “comfort zone.”