## **Developing a growth mindset with Carol Dweck**

#### The Power of YET

In a high school in Chicago, children had to pass eighty-four units to graduate. And if they did not pass, they got the grade "not yet".

She thought that was wonderful. Because if you fail you get nowhere, but if you get a grade "not yet", you are on a learning curve.

"Not yet" gave them a path into the future.

"Not yet" also helped her understand a critical early experience in her career.

# "I love a challenge"

To figure out how kids cope with a challenge, she gave some 10 year olds some problems that were too difficult for them. Some of them reacted in a shockingly positive way. They said things like, "I love a challenge"; "I was hoping this would be informative". They understood their abilities could grow though their hard work. They had what she called a "growth mindset".

But for other children, it was tragic and catastrophic from their more fixed mindset perspective.; their core intelligence had been tested and devastated.

Instead of the power of yet, they were gripped by the "Tyranny of now".

What do they do next?

In one study, after a failure on a test, they said they'd cheat next time instead of study.

In another study, they would find someone who did worse than them so they could feel better.

And in many studies, they found that the students would run away from difficulty.

Looking at how that works in the brain

Moser and his colleagues measured from the brain as kids encountered errors. Processing the errors shows up in red. Looking at the fixed mindset in the brain nothing is happening. But looking at the growth mindset, it's "on fire with yet". They are processing the error, deeply learning from it and correcting it.

How are we raising our kids?

Are we raising them for now (growth) or yet?

Are they focused on the next A or test score instead of dreaming big?

Instead of thinking about what they want to be and how they want to contribute to society?

And if they are too focused on "A"s and test scores, are they going to carry this with them into the future?

Maybe

Because many employers were coming to her and saying, "we've already created a generation of young workers who couldn't get through the day without a reward".

So what can we do? How can we build that bridge to yet

First, we can praise wisely

Praising yet Process Praise Intelligence Praise

Their research shows that when kids were praised for the process they engage in for their hard work, their strategies, their focus, their perseverance – they learn that challenge seeking. They learn that resilience. Praising talent, praising intelligence makes them vulnerable.

There are other ways of rewarding yet

They teamed up with game scientists at the university of Washington to create a math game (brain points). The typical

Talking about equality

In the country, there are groups of kids who chronically show poor performance and many people think that is inevitable. But when educators create growth mindset environments steeped in "yet" equality can happen. math game rewards right answers, right now. They rewarded process and the learning curve of effort, strategy and progress. The brain points game created more sustained learning and perseverance than the standard game.

And just the words "yet" and "not yet" after a student has a set back, they find that that creates greater confidence and greater persistence. They can also change students' mindsets directly.

### Changing mindsets What else can we do?

In one study, they taught students that every time they pushed out of their comfort zone to learn something really really hard and they stuck it to the neurons in their brain could form new, stronger connections and over time they could become smarter. Those who learned this lesson showed a sharp increase in their grades. Those who did not, showed a decrease. They have done this study with thousands of students across the country with similar results. Especially for struggling students.

Sharing a few small examples

One teacher took her Harlem kindergarten class, many of whom could now hold the pencil for the first month, threw daily tantrums. She took them to the 95<sup>th</sup> percentile on the National Achievement Test.

That same teacher took a fourth grade class in the South Bronx – way behind – she took them to the top of New York State on the state math test.

That teacher is a Stanford grad.

Another Stanford grad, PhD student, now a Professor, went back to her native American reservation in the State of Washington. She transformed the elementary school in terms of a growth mindset. That school had always been at the bottom of the

district – at the bottom of the state! Within a year to a year and a half, the kindergarteners and first graders were at the top of the district in reading and reading-rediness. That district contained affluent sections of Seattle so the reservation kids outdid the Microsoft kids. And they did it because learning a growth mindset transformed the meaning of effort and difficulty. It used to mean they were dumb and now it means they have a chance to get smarter. Difficulty just meant "not yet".

### "I've wasted my whole life"

Last year, she got a letter from a 13 year old boy.

He said "Dear Professor Dweck, I read your book. I liked the fact that it was based on sound scientific research. That's why I decided to test out your growth mindset principles in 3 areas of my life. As a result, I'm earning higher grades, I have a better relationship with my parents, I have a better relationship with the other kids at school. I realized I have wasted most of my life."

Let's not waste any more lives because the more we know that basic human abilities can be grown, the more it becomes a basic human right for kids – all kids, all adults – to live in environments that create that growth. To live in environments filled overflowing with "yet"