



PENNANT HILLS PUBLIC SCHOOL



GROWTH MINDSET:

FOR PARENTS

INTRODUCTION



Mindset is a simple idea discovered by world-renowned Stanford University psychologist Carol Dweck in decades of research on achievement and success. Dr Dweck realised that there are two mindsets: a fixed mindset and a growth mindset. A person's mindset can profoundly influence behaviour.

People with a **fixed mindset** believe that their innate abilities and intelligence are fixed traits. You can either do maths or you can't. You can either make friends or you can't. They also believe that talent alone creates success- without effort. With a fixed mindset, there is a reluctance to take on new challenges.

People with a **growth mindset** believe that they can learn, change and develop needed skills through dedication and hard work. They are better equipped to handle setbacks and know that hard work and effort helps them accomplish and learn. This view creates a love of learning and a resilience that is essential for great accomplishment. Virtually all people who achieved top performance had these qualities.

The University of Pittsburgh Office of Child Development conducted a research study which examines the effect of a growth mindset in early childhood and showed that process-focused feedback is a more constructive approach than simply praising a child for an accomplishment. Engaging a child in the process can reinforce the value of effort and persistence and help a child understand that mistakes are part of learning.

As adults, every word and action sends a message. It tells children how to think about themselves. It can be a fixed mindset message...or a growth mindset message. The most important thing you can do to help your child develop a growth mindset is to praise them for process and effort, rather than talent. Messages such as "I like the way you went about solving that problem", "Great job to keep trying and find a different strategy that does work" or "I'm so happy that you learned something from the mistake you made" teach children that effort and process are important in reaching our full potential and that they need to be working purposefully in order to grow. By teaching our children that they can try new things, learn new things, and that their brains are wired to change and grow, we arm them with the tools for life-long learning.

Change Your **Words** and Change Your **Mindset**

*I don't do it well.
What am I missing*

*This is done well enough.
Does this represent my best work?*

*I will never do it like they do.
What can I learn from them?*

*I can't do it.
I am going to train myself to do it.*

*I do this very well.
I'm on the right path.*

*I give up.
I'm going to use the strategies that I learned.*

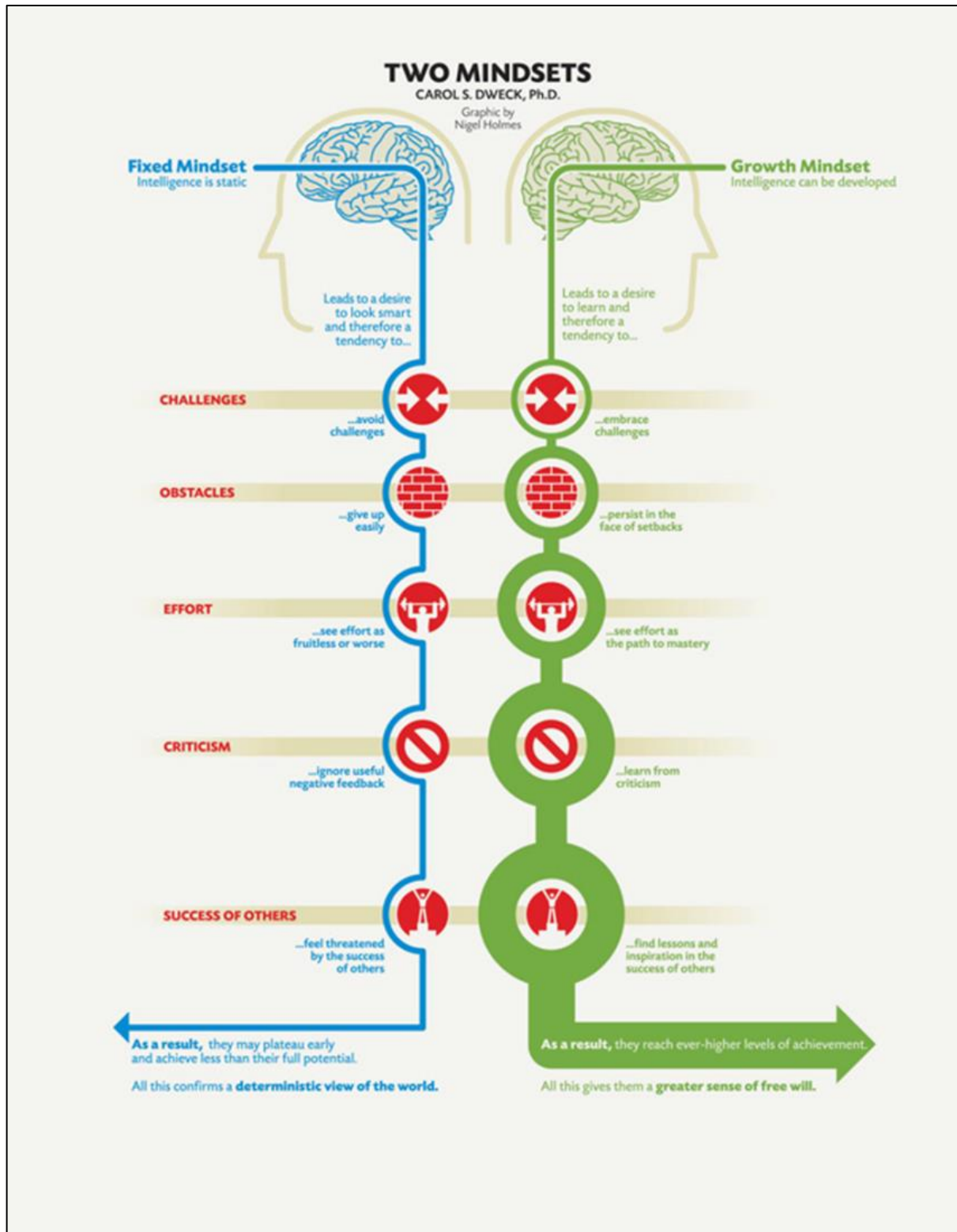
*I made a mistake.
Mistakes help me to learn better.*

*It can't be better.
What can I improve?*

*It's too hard.
I need more time and effort.*



READINGS



GROWTH MINDSET: AN INTRODUCTION

The beginning of each new school year is always full of hope and promise and your children adjust to their new classrooms and teachers. As parents, you would have all kinds of hopes and dreams for your children- and yourselves. You'd like your children to learn and enjoy learning, be happy and to have friends, to develop self-reliance and confidence. You'd like for yourselves to become more calm and patient, to develop systems that make your household more efficient and less stressful, and to experience more loving and caring family connections.

Sounds like a lot of goals and a tall order! But there is a very simple principle which can inform the way you look at these goals and put you in the correct mindset for working on them with yourselves and your children. Mindset is a simple idea discovered by world-renowned Stanford University psychologist Carol Dweck in decades of research on achievement and success. Dr Dweck realised that there are two mindsets: a fixed mindset and a growth mindset. A person's mindset can profoundly influence behaviour.

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A fixed mindset stops you in your tracks and limits your achievement. A growth mindset opens up possibilities and always offers you opportunities to grow and learn.



“ Don't tell me how talented you are.
Tell me how hard you work.
- Artur Rubenstein, pianist

It's not that I'm so smart, it's
that I stay with problems longer.
- Albert Einstein, mathematician ”

FIXED vs GROWTH: THE TWO BASIC MINDSETS THAT SHAPE OUR LIVES

When students and educators have a growth mindset, they understand that intelligence can be developed. Students focus on improvement instead of worrying about how smart they are. They work hard to learn more and grow in their learning. The following is an extract from an article in Brain Pickings, ‘Fixed vs Growth: The Two Basic Mindsets that Shape Our Lives’:

“ In one study, Dr Dweck offered four-year-olds a choice: They could either redo an easy jigsaw puzzle, or try a harder one. Even these young children conformed to the characteristics of one of the two mindsets — those with “fixed” mentality stayed on the safe side, choosing the easier puzzles that would affirm their existing ability, articulating to the researchers their belief that smart kids don’t make mistakes; those with the “growth” mindset thought it an odd choice to begin with, perplexed why anyone would want to do the same puzzle over and over if they aren’t learning anything new. In other words, the fixed-mindset kids wanted to make sure they succeeded in order to seem smart, whereas the growth-mindset ones wanted to stretch themselves, for their definition of success was about *becoming* smarter.

Dweck quotes one seventh-grade girl, who captured the difference beautifully:

I think intelligence is something you have to work for ... it isn't just given to you... Most kids, if they're not sure of an answer, will not raise their hand to answer the question. But what I usually do is raise my hand, because if I'm wrong, then my mistake will be corrected. Or I will raise my hand and say, 'How would this be solved?' or 'I don't get this. Can you help me?' Just by doing that I'm increasing my intelligence.

Things got even more interesting when Dweck brought people into Columbia’s brain-wave lab to study how their brains behaved as they answered difficult questions and received feedback. What she found was that those with a fixed mindset were only interested in hearing feedback that reflected directly on their present ability, but tuned out information that could help them learn and improve. They even showed no interest in hearing the right answer when they had gotten a question wrong, because they had already filed it away in the failure category. Those with a growth mindset, on the other hand, were keenly attentive to information that could help them expand their existing knowledge and skill, regardless of whether they’d gotten the question right or wrong — in other words, their priority was learning, not the binary trap of success and failure.

These findings are especially important in education and how we, as a culture, assess intelligence. In another study of hundreds of students, mostly adolescents, Dweck and her colleagues gave each ten fairly challenging problems from a nonverbal IQ test, then praised the student for his or her performance — most had done pretty well. But they offered two types of praise: Some students were told “Wow, you got [X many] right. That’s a really good score. You must be smart at this,” while others, “Wow, you got [X many] right. That’s a really good score. You must have worked really hard.” In other words, some were praised for ability and others for effort. The findings, at this point, are unsurprising yet jarring:

The ability praise pushed students right into the fixed mindset, and they showed all the signs of it, too: When we gave them a choice, they rejected a challenging new task that they could learn from. They didn't want to do anything that could expose their flaws and call into question their talent. In contrast, when students were praised for effort, 90 percent of them wanted the challenging new task that they could learn from.

The most interesting part, however, is what happened next: When Dweck and her colleagues gave the students a subsequent set of harder problems, on which the students didn't do so well. Suddenly, the ability-praised kids thought they weren't so smart or gifted after all. Dweck puts it poignantly:

If success had meant they were intelligent, then less-than-success meant they were deficient.

But for the effort-praised kids, the difficulty was simply an indication that they had to put in more effort, not a sign of failure or a reflection of their poor intellect. Perhaps most importantly, the two mindsets also impacted the kids' level of enjoyment — everyone enjoyed the first round of easier questions, which most kids got right, but as soon as the questions got more challenging, the ability-praised kids no longer had any fun, while the effort-praised ones not only still enjoyed the problems but even said that the more challenging, the more fun. The latter also had significant improvements in their performance as the problems got harder, while the former kept getting worse and worse, as if discouraged by their own success-or-failure mindset.

It gets better — or worse, depending on how we look at it: The most unsettling finding came after the IQ questions were completed, when the researchers asked the kids to write private letters to their peers relaying the experience, including a space for reporting their scores on the problems. To Dweck's devastation, the most toxic byproduct of the fixed mindset turned out to be dishonesty: Forty percent of the ability-praised kids lied about their scores, inflating them to look more successful. She laments:

In the fixed mindset, imperfections are shameful — especially if you're talented — so they lied them away. What's so alarming is that we took ordinary children and made them into liars, simply by telling them they were smart.

This illustrates the key difference between the two mindsets — for those with a growth one, “personal success is when you work your hardest to become your best,” whereas for those with a fixed one, “success is about establishing their superiority, pure and simple. Being that somebody who is worthier than the nobodies.” For the latter, setbacks are a sentence and a label. For the former, they're motivating, informative input — a wakeup call.

””

FIXED MINDSET		GROWTH MINDSET
<ul style="list-style-type: none"> • SOMETHING YOU'RE BORN WITH • FIXED 	SKILLS	<ul style="list-style-type: none"> • COME FROM HARD WORK. • CAN ALWAYS IMPROVE
<ul style="list-style-type: none"> • SOMETHING TO AVOID • COULD REVEAL LACK OF SKILL • TEND TO GIVE UP EASILY 	CHALLENGES	<ul style="list-style-type: none"> • SHOULD BE EMBRACED • AN OPPORTUNITY TO GROW. • MORE PERSISTANT
<ul style="list-style-type: none"> • UNNECESSARY • SOMETHING YOU DO WHEN YOU ARE NOT GOOD ENOUGH 	EFFORT	<ul style="list-style-type: none"> • ESSENTIAL • A PATH TO MASTERY
<ul style="list-style-type: none"> • GET DEFENSIVE • TAKE IT PERSONAL 	FEEDBACK	<ul style="list-style-type: none"> • USEFUL • SOMETHING TO LEARN FROM • IDENTIFY AREAS TO IMPROVE
<ul style="list-style-type: none"> • BLAME OTHERS • GET DISCOURAGED 	SETBACKS	<ul style="list-style-type: none"> • USE AS A WAKE-UP CALL TO WORK HARDER NEXT TIME.

STUDENT BELIEFS AND SCHOOL EXPERIENCES

This brief article from PERTS is related to how students' beliefs about intelligence shape their experiences in school:

“ On Monday morning, Anna wakes up excited for school. In last week's math class, her teacher introduced fractions. All week, Anna worked hard to understand the concepts, but she still hasn't quite grasped them. It's the first time she's really struggled with math, but she's excited about the opportunity to stretch herself and plans to ask the teacher for help.

A few blocks away, her friend Michael wakes up dreading school. He is in the same math class as Anna, and he's also struggling with math for the first time. Michael worries that his trouble with fractions means that maybe he's just not a "math person." He plans to avoid answering questions in class, because he doesn't want the other kids to think he's stupid.

Why do Anna and Michael react differently to the same experience? Anna is acting with a growth mindset--the belief that intelligence is malleable, while Michael is acting with a fixed mindset--the belief that intelligence is a fixed trait.

Why Do Mindsets Matter?

Students' beliefs about intelligence can have a powerful influence on how they experience school. For students who have a growth mindset, school is an exciting place. It provides them with an opportunity to learn, which is exciting if you believe intelligence can be developed. Learning is how you develop your intelligence. These students also welcome the challenges that they face in school. Challenges signal something that they don't already know, so they are particularly useful opportunities to grow their intelligence.

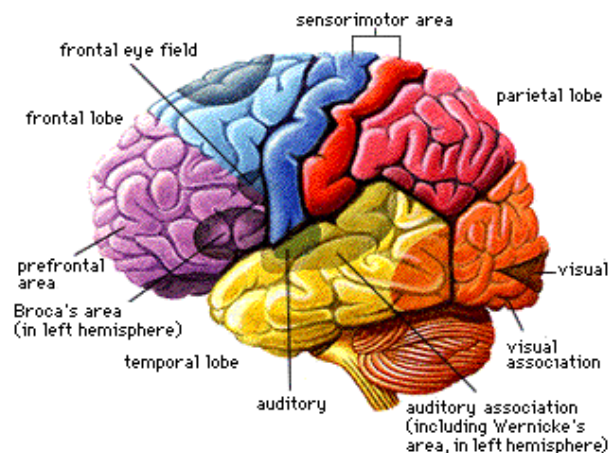
However, for students with a fixed mindset, school can be a threatening place. In a fixed mindset, school is all about judgment and performance. It is a place where students go to be told whether or not they are smart--what they are good at and what they are bad at. They conclude that they are not smart at something if they have to put in effort or if schoolwork is challenging.

When students with a growth mindset face a challenge, they thrive because they work through that challenge with a purpose--the excitement of learning something new and developing their intelligence. When students with a fixed mindset face a challenge, they falter because they believe that they have discovered something they are not good at. ”

GROWTH MINDSET AND THE BRAIN

An important aspect in developing a growth mindset is understanding how the brain functions. Current research shows that the brain is much more malleable than previously thought. It was once believed that the brain did not grow new cells, and that there were severe limitations on the malleability, or neuroplasticity, of the brain after early childhood. In the past few decades, research has shown that learning causes substantial changes in the brains of human beings throughout life.

Thinking occurs in the brain through the chemical communication of nerve cells connected in a complex network. With learning, the cells of the brain develop new connections between them, and existing connections become stronger. Studies in neurophysiology, neuroanatomy and brain imaging have shown that when people practice and learn new skills, the areas of the brain responsible for those skills actually become larger and denser with neural tissue, and that new areas of the brain become active when performing related tasks. Furthermore, it has been found that the brain continues to grow new nerve cells, or neurons, daily, and that this process speeds up when a lot of active learning is occurring.



Thus, the brain has the capacity to develop throughout life. However, this development depends on the stimulation of challenge and learning. This fact makes it all the more critical that students be motivated to apply effort, take an active role in learning and embrace challenges of learning.

TIPS FOR PARENTS

A GROWTH
MINDSET

Means that you believe
INTELLIGENCE
can be
DEVELOPED

And you have a
PASSION
to
LEARN
which means you

Embrace
challenge

LEARN
from criticism

KEEP GOING
WHEN THINGS GET
TOUGH

Are
INSPIRED
by the
GREATNESS
in others

AND

SEE
effort
AS THE PATH TO
mastery

TIPS FOR PARENTS



- Explain to your child how the brain can grow stronger and that intelligence can improve throughout your life. Intelligence is not fixed. It's changeable. This is called brain plasticity.

What's more, learning **CHANGES** our brains. Children need to know this is possible.

- Develop a feeling in your child that he/she has the power to do something through their own efforts. When using their brain in an effective way, children feel more in control of themselves and what they can achieve. Praise your child for using different parts of their brain eg
 - "Drawing a picture is a great problem-solving strategy."
 - "I liked how you explained the problem out loud- it helps to talk about things."

- Give feedback on **PROCESS** only. **Praise effort, persistence, strategies, seeking challenges, setting goals, planning, or using creative strategies.** Don't praise personal abilities like being smart, pretty, or artistic.

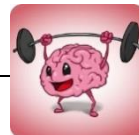
A. Praise the strategy e.g., "You found a really good way to do it."

B. Praise with specificity e.g., "You seem to really understand how to add two numbers."

C. Praise effort e.g., "I can tell you've been practising."

- Reinforce that effort brings about more success- and working hard can be hard! Remind your child that when he/she is working hard, they are 'working out' their brain and using it like a muscle to make it grow stronger. Say things like:
 - "If it is easy, you aren't learning anything new."
 - "When it's hard work, you're building your brain and making it stronger."
 - "Everything is hard before it gets easy."
 - "Sometimes it takes lots of practice to learn something new."





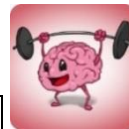
- Encourage your child to use new strategies and not be discouraged by difficulties. Reminding your child that a new task can be tough, especially when it is a brand new skill, will help them stay persistent. Knowing that other people struggle, too, helps children overcome their frustration with difficult tasks. Eg
 - “I don’t know anyone who hasn’t struggled with this problem.”
 - “If you could already do this without effort, you wouldn’t be learning anything.”

- Acknowledge that making mistakes is an important part of learning. Now is the time to let our children risk and fail. **Failure teaches our children important life lessons. For one, it’s how they learn resiliency** But we often want to prevent our children from failing, from feeling upset or sad. Don’t. We must let our children fail now so that they can strengthen their growth mindset muscles. If we don’t, they will be adults with no perseverance, with no belief in their abilities to work hard and succeed.
 - “You can use this mistake. Think about why it didn’t work, and learn from it.”
 - “Never mind. Try again.”
 - “A mistake-fine. What can you learn?”
 - “Mistakes are wonderful opportunities to learn.”

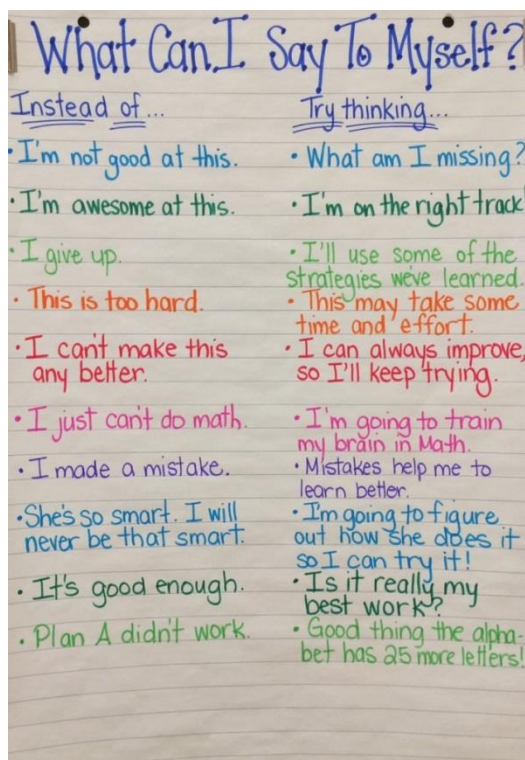
- Encourage your child to take a risk. Watch and listen to your child so you can take cues about what else they are ready to tackle. Vygotsky calls this the “zone of proximal development” – when we gently nudge children to use what they know to try something just a bit out of their reach, but yet developmentally appropriate. By offering small but achievable challenges, confidence and persistence emerge.

- Remind them of the power of the word “yet”. When your child says that they can’t do something, tell them “yes, Jack, you can’t do this YET, but with practice you will be able to do it.” The power of this word is huge! All of a sudden, learning becomes achievable instead of that distant goal that seems beyond reach. Make YET a powerful word in your vocabulary.





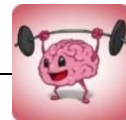
- Encourage and model positive self-talk. Tell your child to use that little voice they hear in their head to move them towards their goals and achieving something positive. The self-talk of a child with growth mindset sounds like “Giving talks is hard. But I’m going to give it a go and do my best.” The self-talk chart below from Fieldcrest Elementary is a good illustration of this:



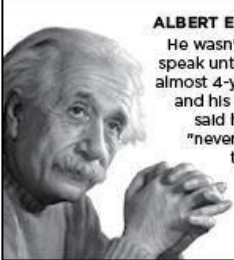
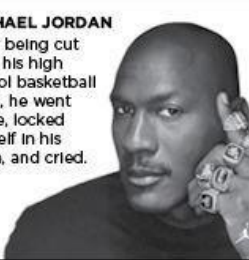

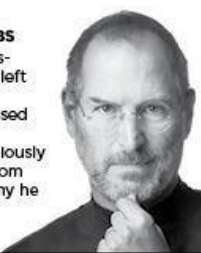


- Be persistent and growth-orientated yourself. Narrate your thoughts as you try something new or frustrating (with a G-rating, of course!). Your child may even be able to offer some helpful tips. This allows children to see we all have to work hard to solve problems and we all continue to learn new things.

- Discourage envy of peers, and talk to your child about what he or she can learn from others who appear more successful. While skills may come more easily to some, most often there's the (possibly unseen) element of practice, persistence and hard work which leads to success.





- Model persistence and share other success stories. Share your stories of 'happy endings', but be sure to include the setbacks you encountered along the way. Share other success stories of people who failed, made mistakes and still persevered. Sport offers a great variety of such examples.

FAMOUS FAILURES	
 <p>ALBERT EINSTEIN He wasn't able to speak until he was almost 4-years-old and his teachers said he would "never amount to much"</p>	 <p>MICHAEL JORDAN After being cut from his high school basketball team, he went home, locked himself in his room, and cried.</p>
 <p>WALT DISNEY Fired from a newspaper for "lacking imagination" and "having no original ideas."</p>	 <p>STEVE JOBS At 30-years-old he was left devastated and depressed after being unceremoniously removed from the company he started.</p>
 <p>OPRAH WINFREY Was demoted from her job as a news anchor because she "wasn't fit for television."</p>	 <p>THE BEATLES Rejected by Decca Recording studios, who said "We don't like their sound—they have no future in show business."</p>
IF YOU'VE NEVER FAILED, YOU'VE NEVER TRIED ANYTHING NEW	

- Let children know when they have demonstrated a **growth mindset!**

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Oxford Learning

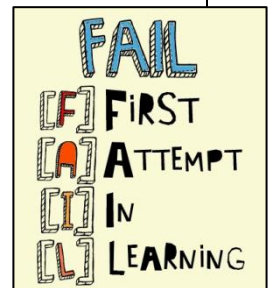
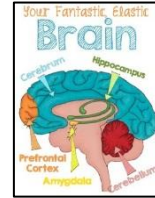
Your Brain Health



PHPS GROWTH MINDSET UNIVERSAL LANGUAGE




- My brain is fantastic and elastic!
- Train my brain.
- The more I use my brain, the stronger it gets.
- ... YET
- I love challenges!
- The more effort I put in the better I seem to get.
- Never give up!
- FAIL = First Attempt In Learning
- It is OK to make mistakes.
- Mistakes help me learn.



My Favourite MISTAKES

Means
I
Start
To
Acquire
Knowledge
Experience
Skills

A mistake that moved my learning on.....



FOR YOU TO
REMEMBER!

**Don't praise
achievement**

PRAISE EFFORT AND STRATEGIES FOR OUTCOMES

Do praise

- **Effort**
- **Risk-taking**
- **Challenge seeking**
- **Strategies for learning**
- **Optimism**
- **Resilience**

Developing student mindset at
PHPS



You Can Learn Anything

FOR YOUR
FRIDGE



GROWTH

MINDSET

We know that:

- **Mistakes help us learn**
- **We can train our brains**
- **We embrace challenge**
- **Growth requires effort**
- **We can learn from the success of others**
- **Learning is hard work.....and we love hard work at PPHS!**



You Can Learn Anything