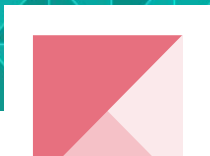




# Formative Assessment

## the key to successful teaching and learning

*Stella Gruffydd January 2025*



# Just asking...

*Why did you choose to be a teacher?*

*What are /will be your values as a teacher?*

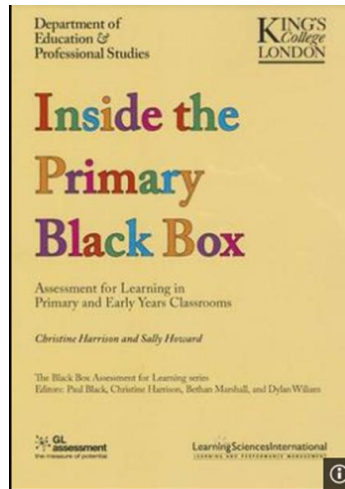
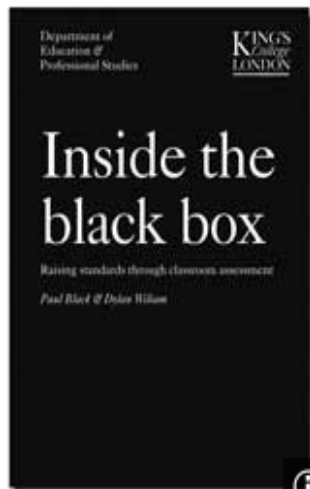
*What is it like to be a pupil in your class/ lessons?*

*What will your contribution be to their development?*



The greatest impact on learning is the daily lived experiences of students in classrooms, and that is determined much more by how teachers teach than by what they teach.”

— Dylan Wiliam,  
*Embedded Formative Assessment*



**Curriculum is everything a learner experiences at school.**

When designing a curriculum detailed consideration needs to be given to:

- **What** we teach
- **Why** we teach it.
- **How** we teach it



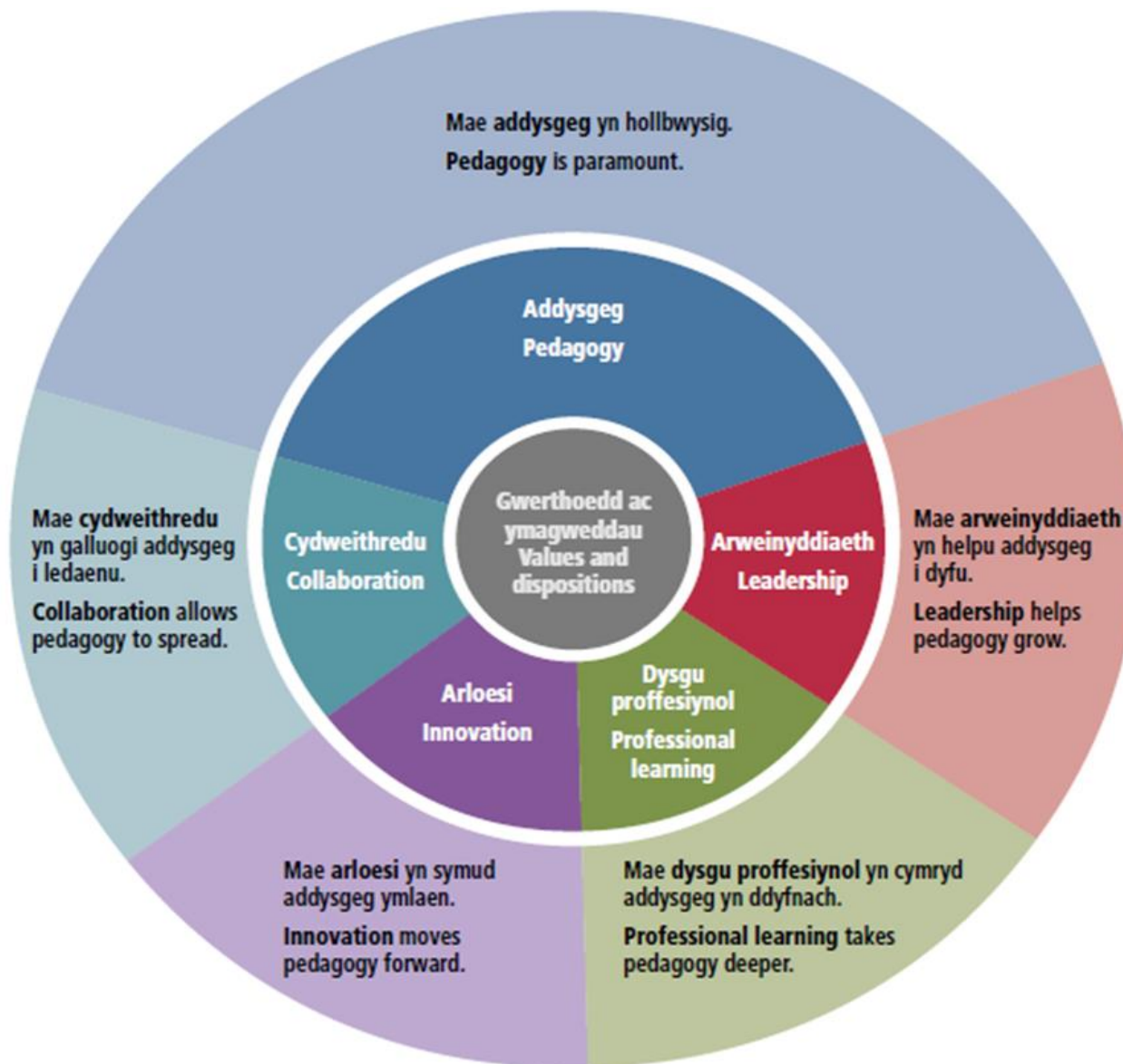


**WHEN THE ROOT IS DEEP  
THERE IS NO REASON TO  
FEAR THE WIND**

# Curriculum for Wales 4 purposes



## Professional standards for school practitioners in Wales





***What is Formative Assessment?***

***What do you know about it ?***



## **Formative Assessment is...**

The process used by teachers and students to recognise and respond to student learning in order to enhance that learning **during the learning**

*Cowie & Bell 1999*

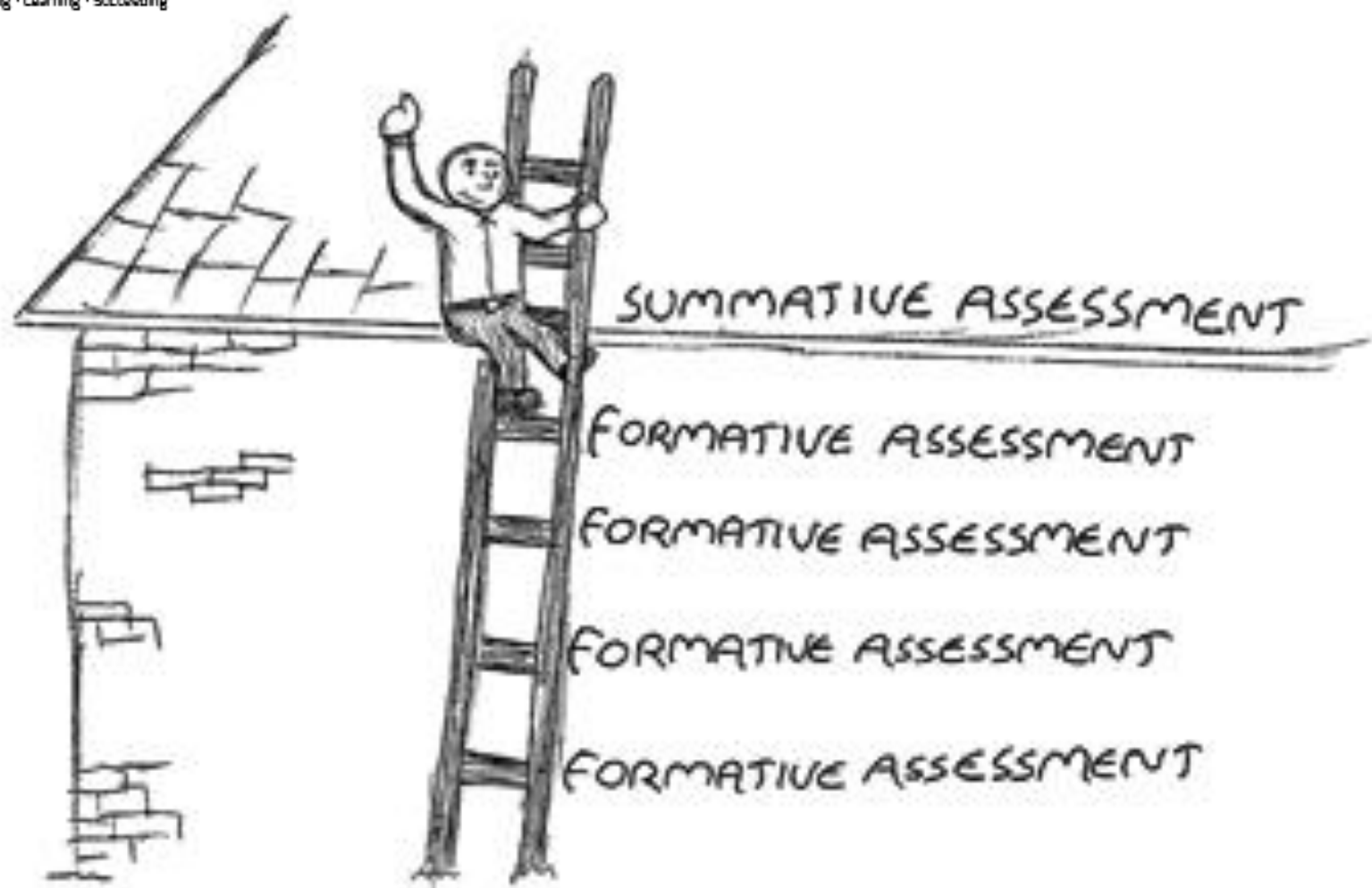
# FORMATIVE VS SUMMATIVE ASSESSMENT

## FORMATIVE

- Occurs during the learning process
- Allows teachers and students to pivot their strategies mid-stream.
- Identifies areas for improvement.
- Gives opportunities for students to implement feedback.

## SUMMATIVE

- Occurs at the end of the learning process
- Provides a final evaluation of knowledge and skills.
- High-stakes testing that often involves ranking of students.
- Provides students with a grade



***The most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly.'***

***Ausubel (1968)***



# Why Assessment for Learning/ Formative Assessment?



*“When  
implemented  
well, formative  
assessment can  
effectively double  
the speed of  
student learning  
(Dylan Wiliam, 2007).”*

# 12 Pedagogical Principles

<b>1.</b> <b>Overall purposes of the curriculum</b>	<b>2.</b> <b>Sustained effort</b>	<b>3.</b> <b>Blend of approaches</b>	<b>4.</b> <b>Problem solving, creative and critical</b>
<b>5.</b> <b>Build on previous knowledge and generate interest</b>	<b>6.</b> <b>Authentic contexts</b>	<b>7.</b> <b>Assessment for Learning</b>	<b>8.</b> <b>Making connections within and across AOLEs</b>
<b>9.</b> <b>Cross-curricular responsibilities</b>	<b>10.</b> <b>Encourage to take increasing responsibility</b>	<b>11.</b> <b>Social and emotional development</b>	<b>12.</b> <b>Encourages collaboration</b>

# Assessment- Curriculum for Wales

- ‘Assessment is essential to curriculum design. Its overarching purpose is to **support every learner to make progress.**
- Assessment should always focus on **moving learning forward by understanding the learning which has already taken place** and using this to ensure that **each learner is challenged and supported appropriately, according to their individual learning needs.**
- ‘It requires **partnerships among all those involved, including the learner.** It should recognise the individual learning needs and backgrounds of each learner and **encourage a holistic view of each learner’s development.**
- Accordingly, both practitioner and learner should develop an **understanding of how the learner learns** and their **attitude and approach to learning**, in order to support them to **continue to progress and to foster commitment to their learning.**

# Assessment Purposes

## **1.Supporting individual learners on an ongoing, day-to-day basis**

Consistently high-quality formative assessment in the classroom day in and day out gives learners and practitioners a clear picture of attainment and next steps.

## **2.Identifying, capturing and reflecting on individual learner progress over time**

## **3.Understanding group progress in order to reflect on practice.**



***What is Formative Assessment?***

***What do you know about it ?***

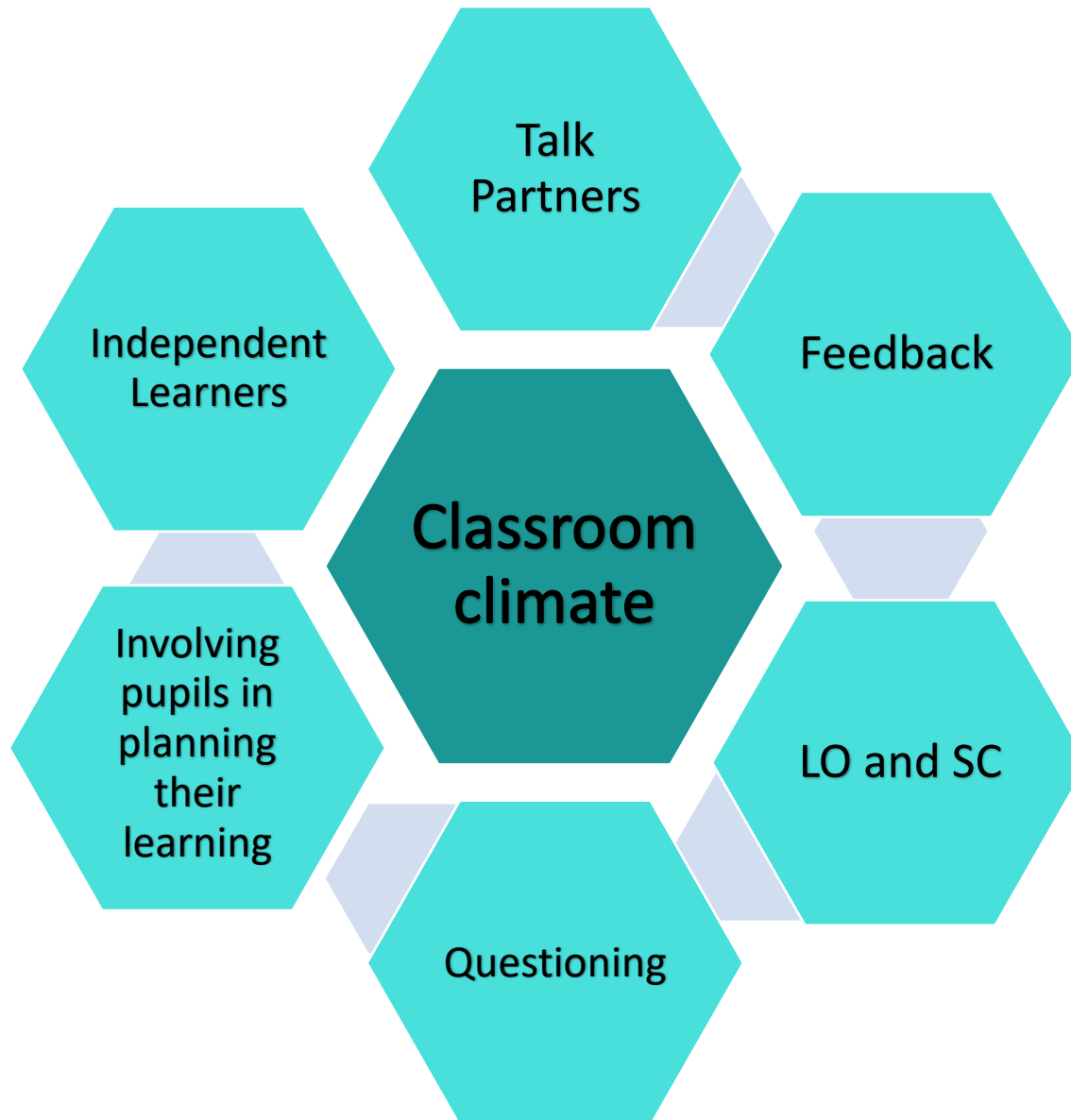
**GwE and Shirley Clarke**  
**Formative Assessment Action Research Project**  
**2017-2021**

# Shirley Clarke

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- <https://www.shirleyclarke-education.org/>
- <https://cefnogaeth.gwegogled.d.cymru/shirley-clarke-guidance-papers/?lang=en>
- <https://cefnogaeth.gwegogled.d.cymru/shirley-clarke-presentations/?lang=en>



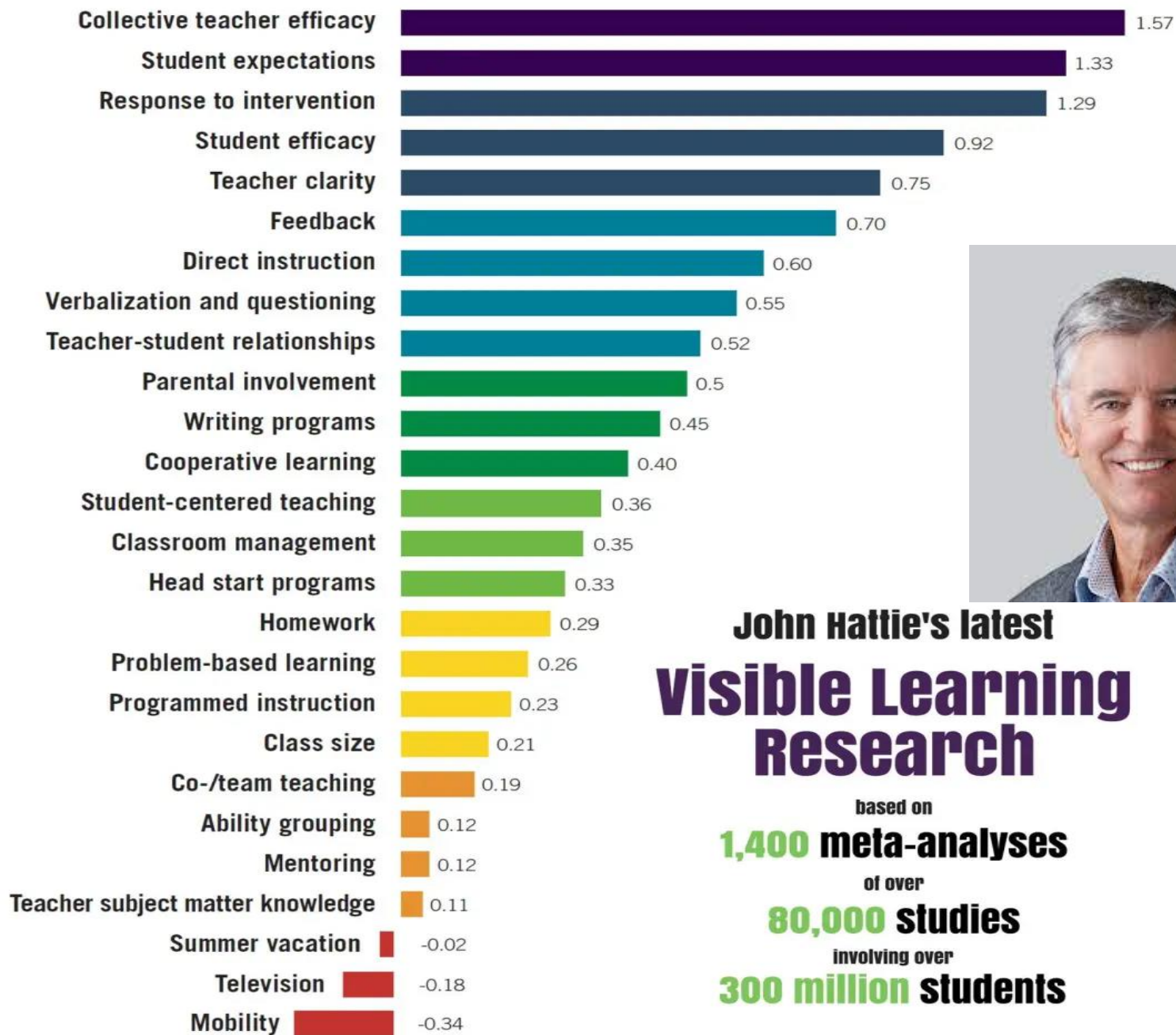




# DYSGU GWELEDOL / VISIBLE LEARNING...



Assessment literate students	1.44
Providing Formative evaluation	0.9
Classroom discussion	0.82
Teacher/ student relationships	0.75
Feedback	0.72
Meta-cognitive strategies	0.69
Homework	0.29
Class size	0.21
Matching styles of learning	0.17
Ability grouping	0.12
Moving schools	-0.34



## John Hattie's latest **Visible Learning Research**

based on  
**1,400 meta-analyses**  
of over  
**80,000 studies**  
involving over  
**300 million students**

# Numbers

	Ysgolion/Schools	Athrawon/Teachers
<b>Haen/Tier 1 2017-18</b>	<b>27</b> (22+5)	<b>54</b>
<b>Haen/Tier 2 2018-19</b>	<b>193</b> (168+22+3)	<b>386</b>
<b>Haen/Tier 3 2019-20</b>	<b>140</b> (117+17+7)	<b>261</b>
<b>CYFANSWM/TOTAL</b>	<b>360</b>	<b>701</b>

**89% o ysgolion y rhanbarth/ region's schools**

96% Cynradd/Primary

80% Uwchradd / Secondary

70% Arbennig / Special

**17,500 disgybl/pupils**

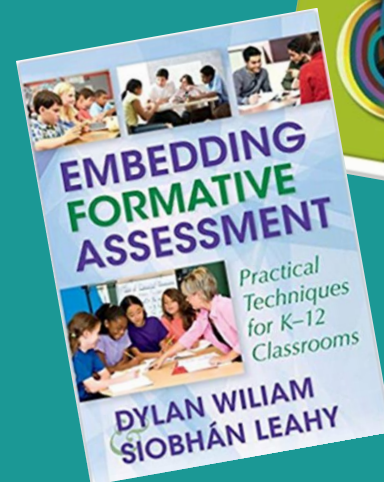
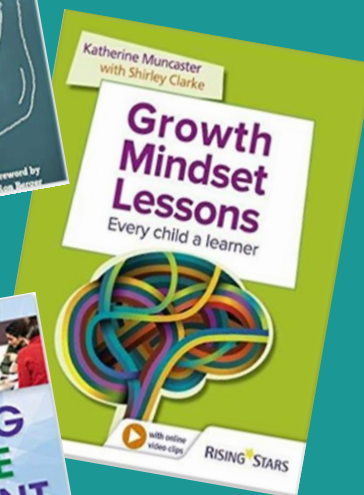
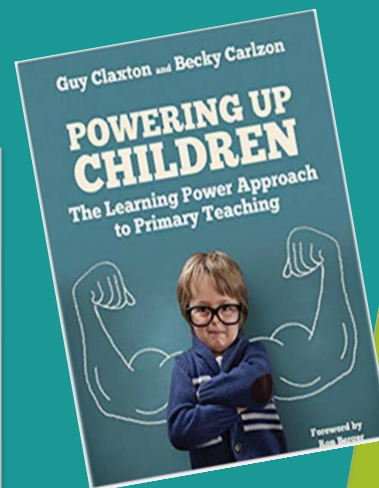
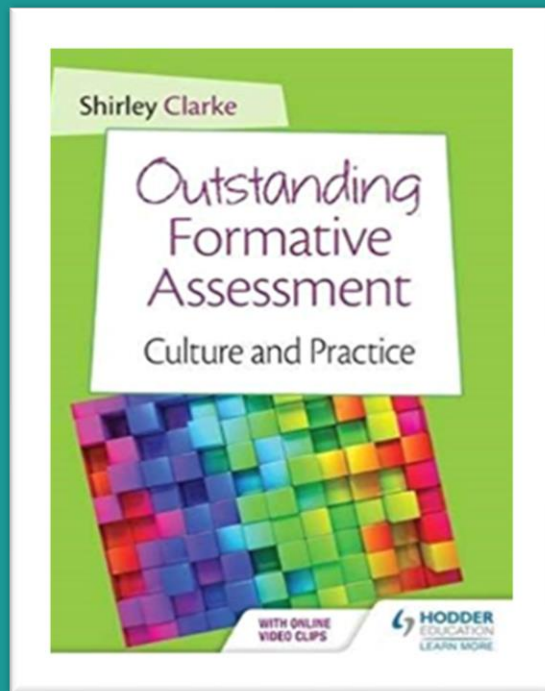
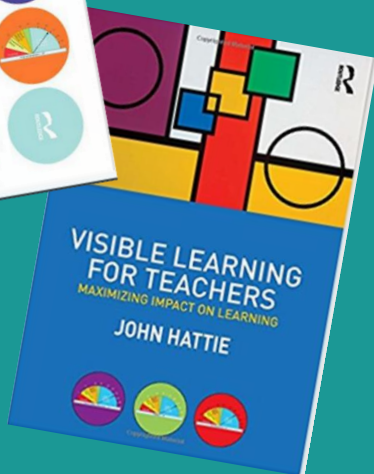
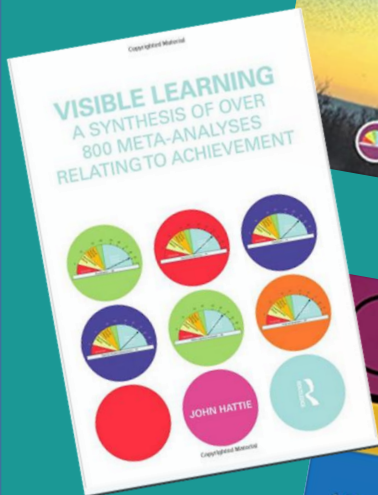
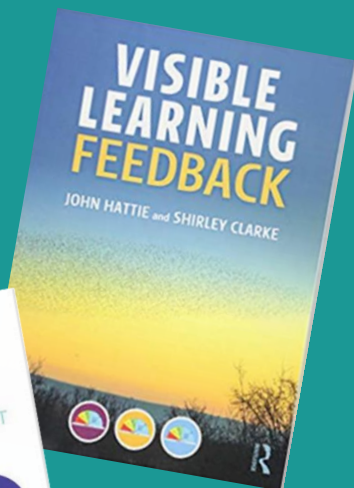
***Cynhadledd penaeithiaid Mawrth 2019 - 360 yn bresennol***

***Headteachers conference March 2019 – 360 present***

## How did it work?

- 1 Training day**
- 2. Review meeting 0.5 day**
- 3. Training day 2**
- 4. Review meeting 2**
- 5. Showcase research and impact**









# Eliminating Rewards and Ability Groups

**Effect**

"We believe that recognition and celebration of success must be acknowledged when the individual goes a step further than expected in his/her behaviour, effort and achievement, or when the individual is seen to take responsibility for self-motivation or self-regulation."

**Effect**

"We do not reward work, performance, tasks or anything the child does that is expected of them in their learning."

**Effect**

"We believe that everyone has the opportunity to learn the same subject. Pupils do not learn in every day nor in every area, and therefore, why group them in?"

**Effect**

"Why is the child pepper strategy effective?"

"We know what the best way to use is changing the context. It is independent."

"We discuss the different levels of when given reason why 'No' is a better answer than 'Yes' than I know what I'm comfortable with, so I do to challenge it."

**Effect**

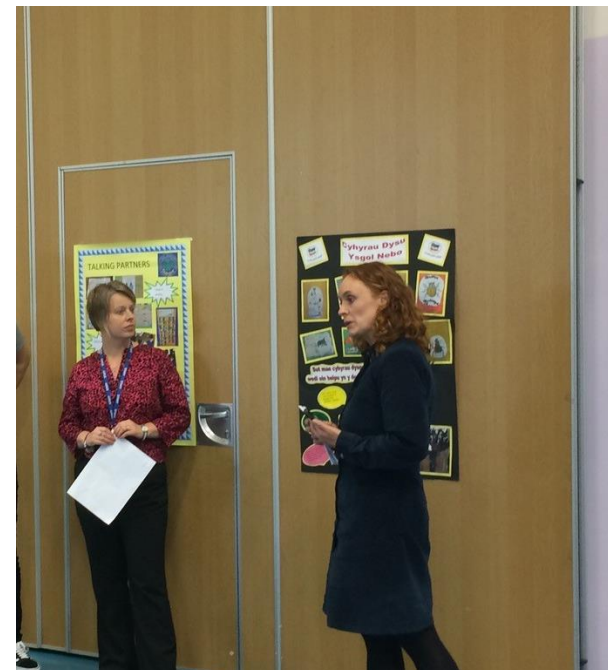
"We have discovered that using the chili pepper strategy does not set a limit on any pupil's potential."

**Effect**

"Motivation is the most important factor in determining whether you succeed in the long run. What I mean by motivation is not only the desire to achieve, but also the love of learning, the love of challenge and the ability to thrive on obstacles. These are the greatest gift we can give our students." (Dweck, 2006)

**Desborth Cennedd**

**Mild**



# Adborth

## Gwahanol ddulliau o gynnyg adborth

**Canfod y Côd**

**Adborth Cyfoedion**

**Deialog Athro / Dysgwr**

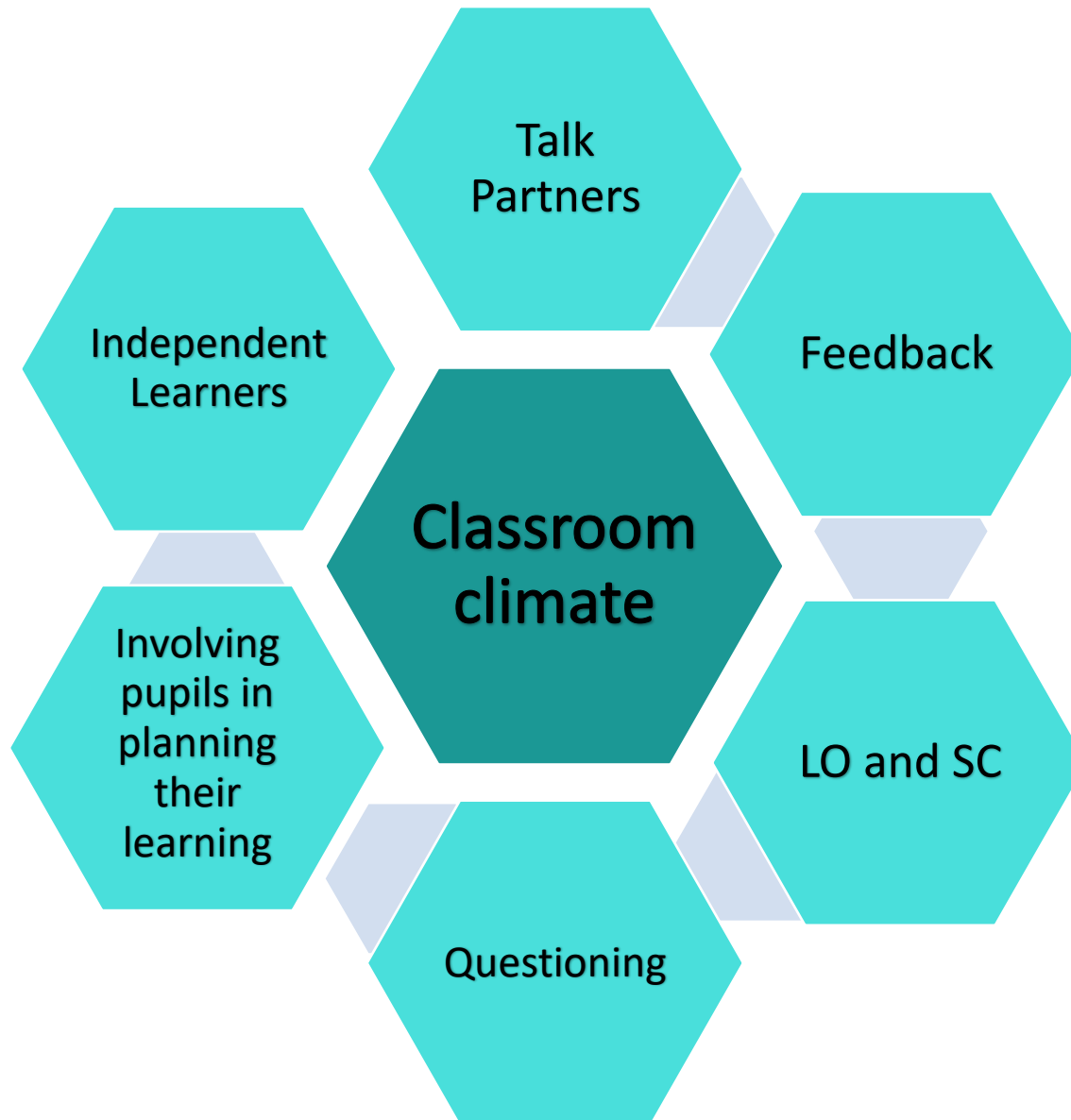
**Er mwyn i adborth arwain at welliant, mae angen i ddysgwyr gadael y gallu i'w hysbysu a'u hysbysu. Mae hyn yn golygu bod dysgwyr yn mynd i'r ddrailwr drosynt eu hunain i weld beth sydd angen eu hysbysu, a dylai'r adborth hwnnw rai awgrymiadau yn hytrach nag atebion cyflawn.**

**David Diddan a Nick Doss**



# Impact

- Impact on pupils' standards of **wellbeing** , their **attitudes towards learning** and their development as **independent learners**.
- Teachers using research evidence to develop their own practices, Significant **action research** and **innovation**
- Increased focus on **effective pedagogy**.
- Positive impact on the **quality of teaching**
- Benefit from **collaborating** across the region and across sectors.
- Readiness for the **Curriculum for Wales**





Cydweithio • Dysgu • Llwyddo  
Collaborating • Learning • Succeeding

# Establishing classroom climate and culture for Formative Assessment

- *Mindset*
- *Learning Powers*
- *Learning Zones*
- *Talk Partners*
- *Eliminating Ability Groups*

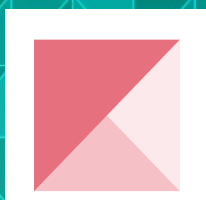
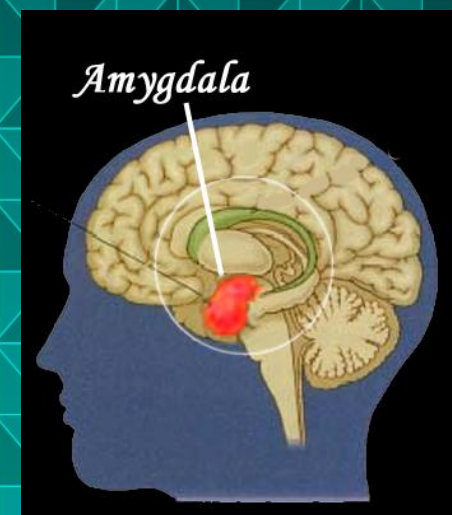






# Can you think of a member of staff who inspired you when you were in school

## 3 words to describe



# Who wrote this poem?

## **“Hello Sir”**

Hello Sir, remember me?

I’m the man you thought I’d never be

The boy who you reduced to tears

Lad called ‘thingy’ for six whole years.

Yes that’s right, my name’s Bob

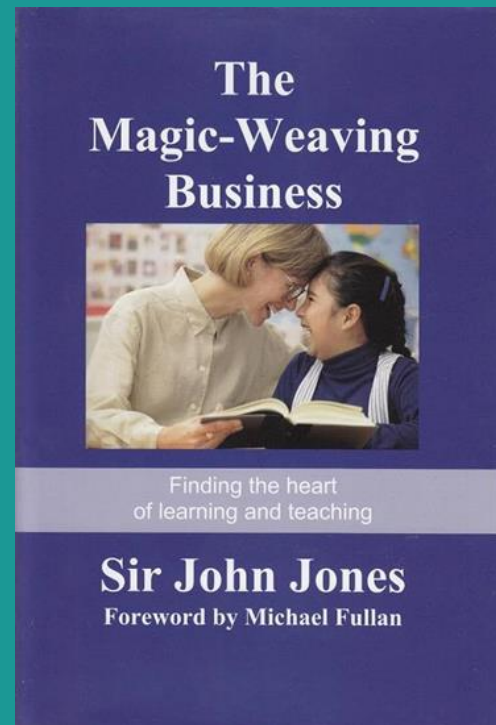
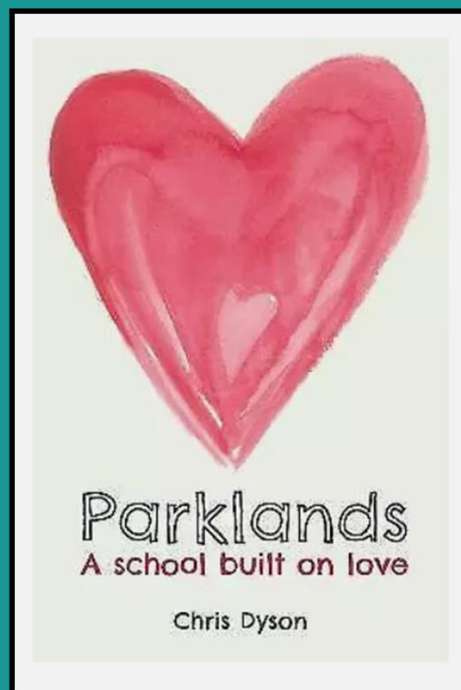
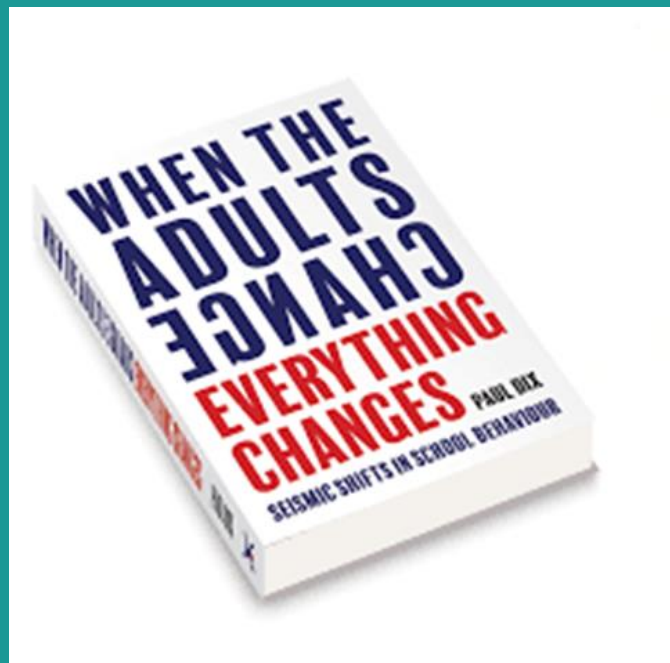
The one who landed the pop star’s job

The one you told look, don’t touch

The kid who wouldn’t amount to much.







# Metacognition - learning about learning

---

- Thinking about the way I think, aware of my own knowledge, understanding my intelligence.
- Understanding the ways in which I learn best, e.g 'learning to learn' lessons. BUT important to discuss in EVERY lesson

- Mike Gershon Resources:

[adnoddau Mike Gershon\001 - Developing T&L - Metacognition Guide.pdf](#)

[adnoddau Mike Gershon\001 - Developing T&L - Metacognition Resource Pack - Editable.pdf](#)

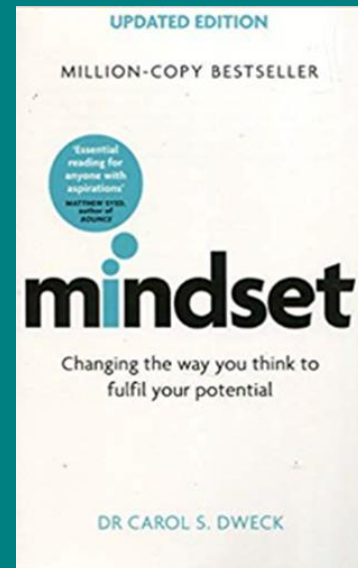




## THE NEW PSYCHOLOGY OF SUCCESS

**Mindset** is a simple idea discovered by world-renowned Stanford University psychologist Carol Dweck in decades of research on achievement and success—a simple idea that makes all the difference.

Teaching a growth mindset creates motivation and productivity in the worlds of business, education, and sports





# Ability myths

## Ability is something.....

- We are born with (or without) as part of our genetic inheritance;
- Child prodigies have a prodigious amount of
- That doesn't change much over time

## New thinking.....

- Genes play a far less direct role than historically assumed;
- It is the interplay of genes and the environment that is critical;
- Ability is developed over time, and high ability needs unusual levels of motivation and practice



# Which mindset are you thinking with?

I feel clever when I'm having to really stretch my brain or face a challenge	I tend to give up if things get tricky or I'll have to work too hard
I like getting constructive feedback/criticism	It doesn't matter if I fail
I feel clever when I make no mistakes	You can grow your intelligence
I'm not worried about what other people think of my 'abilities'	I feel stupid when I fail
I worry about what my peers think of my 'abilities'	I think you're born with a certain amount of intelligence and that doesn't really change



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Effort



"My secret is practice. I have always believed that if you want to achieve anything special in life you have to work, work, and then work some more."

David Beckham



Downsbrook

*Learning together, achieving for*



Gordon Stobart

## The Expert Learner

CHALLENGING THE MYTH OF ABILITY

EXPANDING EDUCATIONAL HORIZONS  
SERIES EDITORS: LOUISE STOLL & LORNA EARL

***“If teachers encourage students to believe that they can learn more and become smarter if they work hard and practice, Dweck’s findings suggest, it is more likely that students will in fact learn more, and learn it faster and more thoroughly, than if they believe that learning is determined by how intelligent or unintelligent they are.”***

***“Her work has also shown that a growth mindset can be intentionally taught to students”***

Fixed Mindset	Growth Mindset
Intelligence is static. I must look clever!	Intelligence is expandable. I want to learn more!
Avoids challenges	Embraces challenges
Gives up easily	Persists in the face of setbacks
Sees effort as pointless	Sees effort as the way
Ignores useful criticism	Learns from criticism
<b><i>Likely to plateau early and achieve less than full potential</i></b>	<b><i>Reaches ever higher levels of achievement</i></b>






**A growth mindset** means that you thrive on challenge, and don't see failure as a way to describe yourself but as a springboard for growth and developing your abilities.

Your intelligence and talents are all susceptible to growth

**In the fixed mindset,  
when you fail; you're a failure –  
In the growth mindset,  
when you fail; you're learning**



I have not failed. I've just found  
10,000 ways that won't work.

Thomas A. Edison

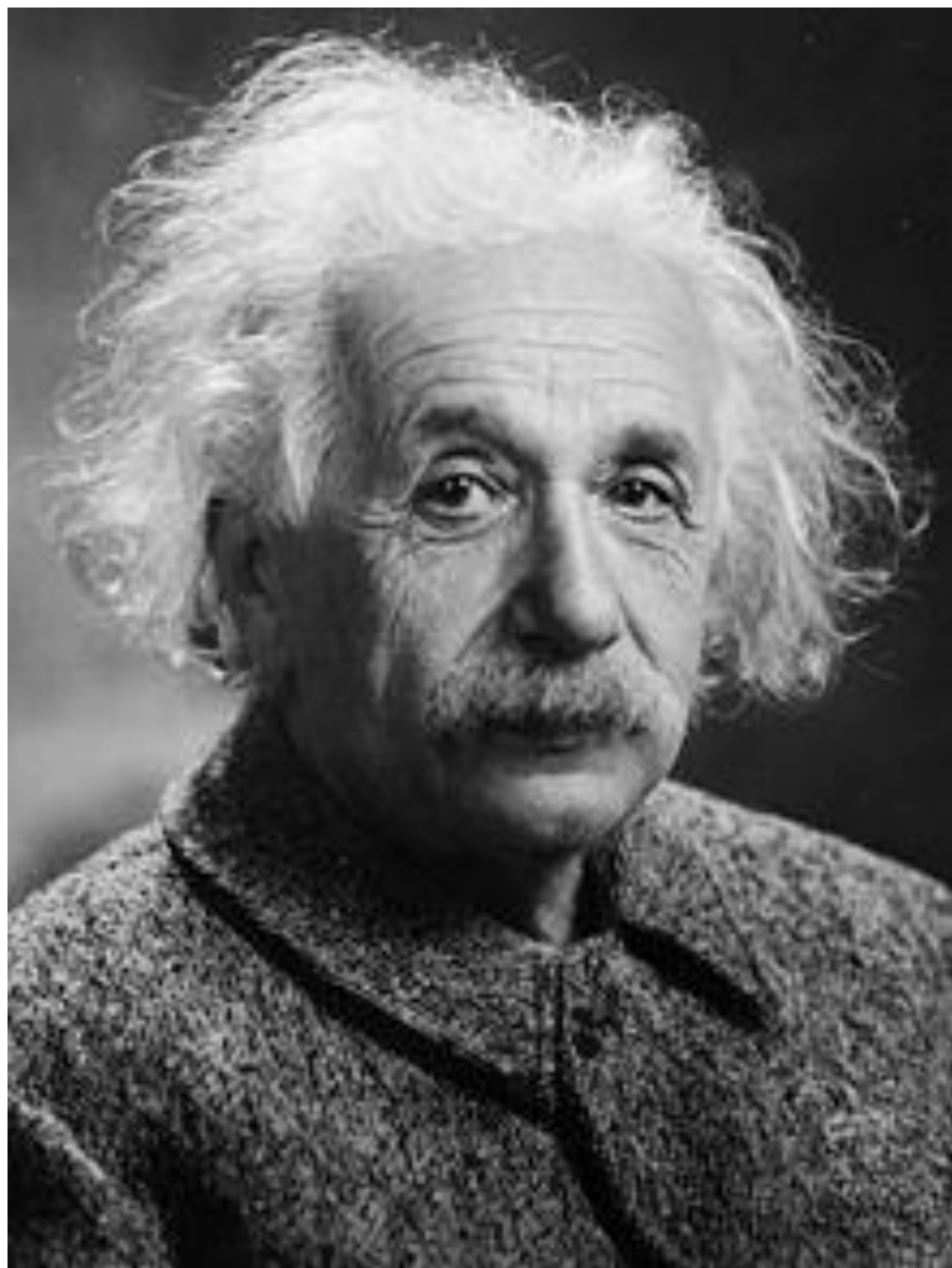


# Famous Failures

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- 104 failures throughout his life
- He didn't speak until he was 4 years old
- He didn't read until he was 7 years old
- He went on to win a Nobel prize
- Successful face in Science (Physics)





- 302 failures
- Lost his job as a journalist due to 'lack of imagination' and because he had no 'unique ideas'
- Turned down 302 times until he raised the money to create a huge leisure park







Rejected by Decca Recording Studios:

*“Don’t like their sounds, there’s no future for these in the world of music”*





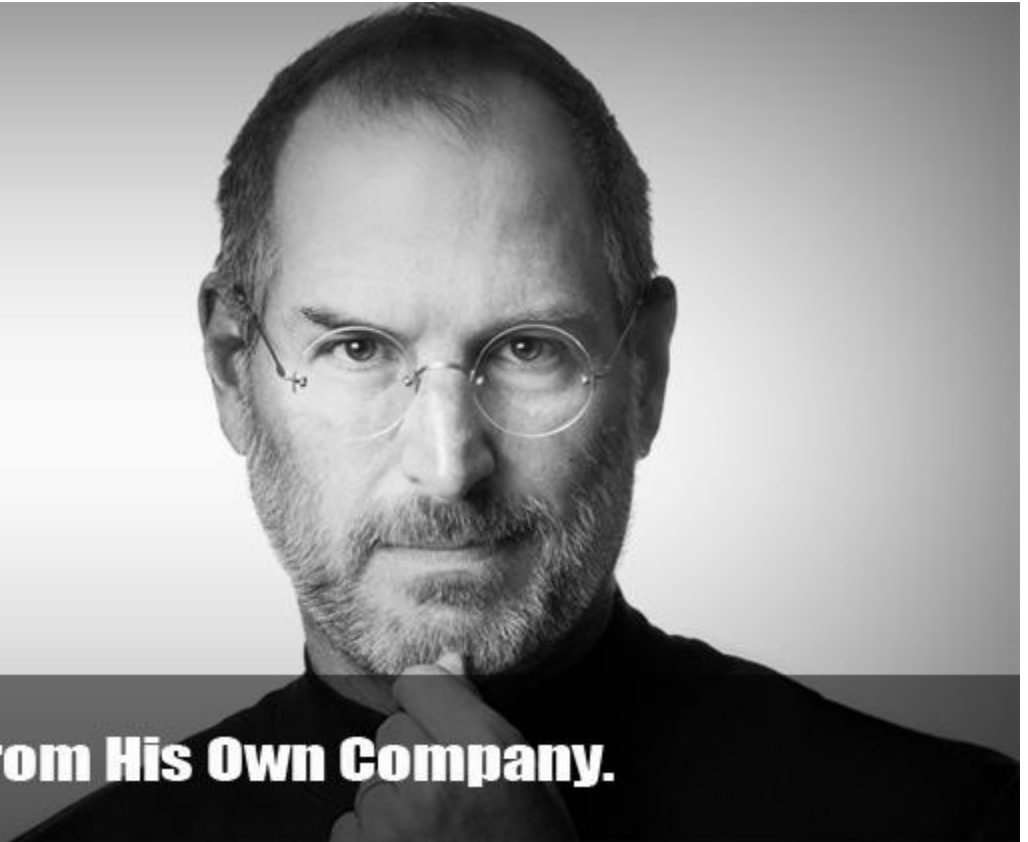
- At the age of 30, to his great disappointment and sadness, lost his position in the company he founded?
- Through perseverance, in the face of obstacles, great success came to him- his contemporary products are a clear reflection of this



**Steve Jobs**

---

**Fired From His Own Company.**







- The first book in her series was rejected by 12 publishers before it was accepted





## **JK ROWLING'S**

first Harry Potter book  
was rejected by 12  
publishing houses  
before it was  
finally accepted.

**FAMOUS FAILURE SERIES**

**IF YOU'VE NEVER FAILED  
YOU'VE NEVER TRIED ANYTHING NEW**

## Mindsets in practice in school...

Metacognition- feeds through every lesson and school life in general

Aim to have ALL thinking with a Growth Mindset

Embrace mistakes as a way to Learn

Change the way we praise

Change the way we offer feedback

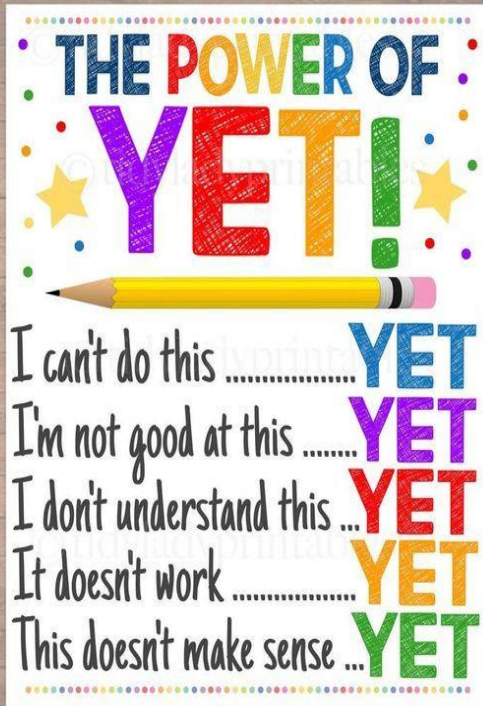
## Give feedback on

- Ability
- Speed
- Getting everything right without effort

## Give Feedback on ...

- Achievement
- Effort
- Mistakes disclosed
- Coping Strategies
- Facing Challenges

# How to encourage learners:



## DEVELOPING A GROWTH MINDSET

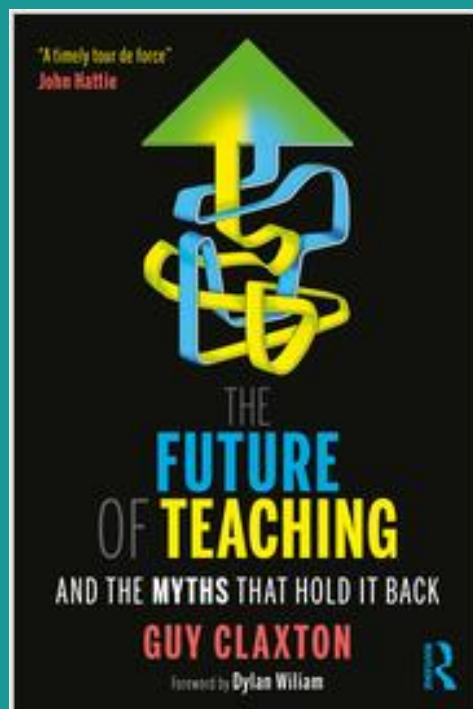
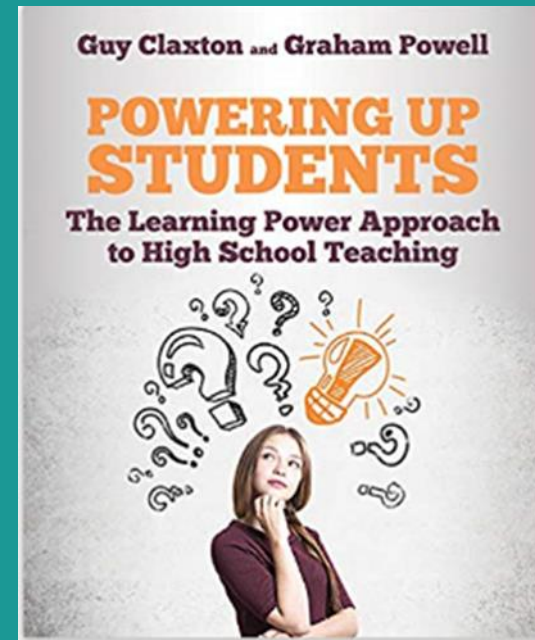
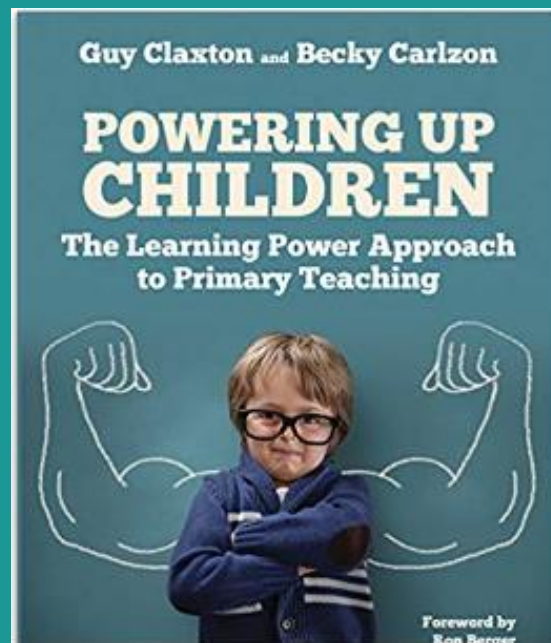
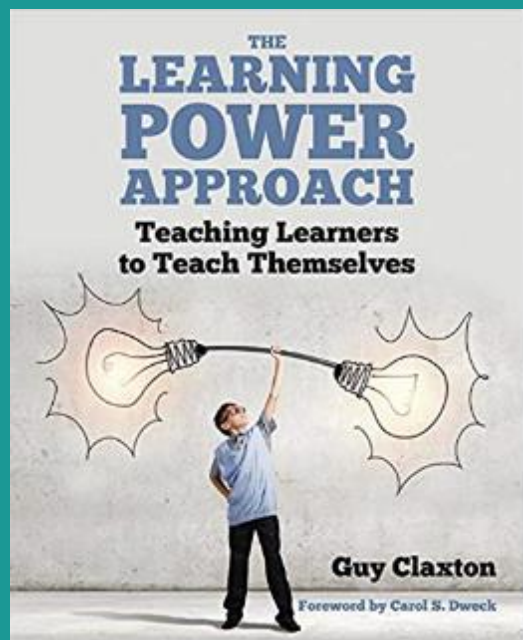


INSTEAD OF.....	TRY THINKING....
I'm not good at this	What am I missing?
I give up	I'll use a different strategy
It's good enough	Is this really my best work?
I can't make this any better	I can always improve
This is too hard	This may take some time
I made a mistake	Mistakes help me to learn
I just can't do this	I am going to train my brain
I'll never be that smart	I will learn how to do this
Plan A didn't work	There's always Plan B
My friend can do it	I will learn from them



# Our Mindsets , failures, successes



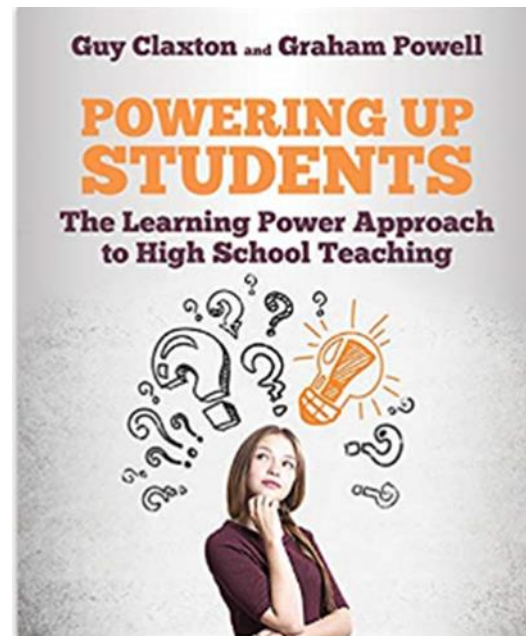


# Pwerau Dysgu - Guy Claxton - Learning Powers

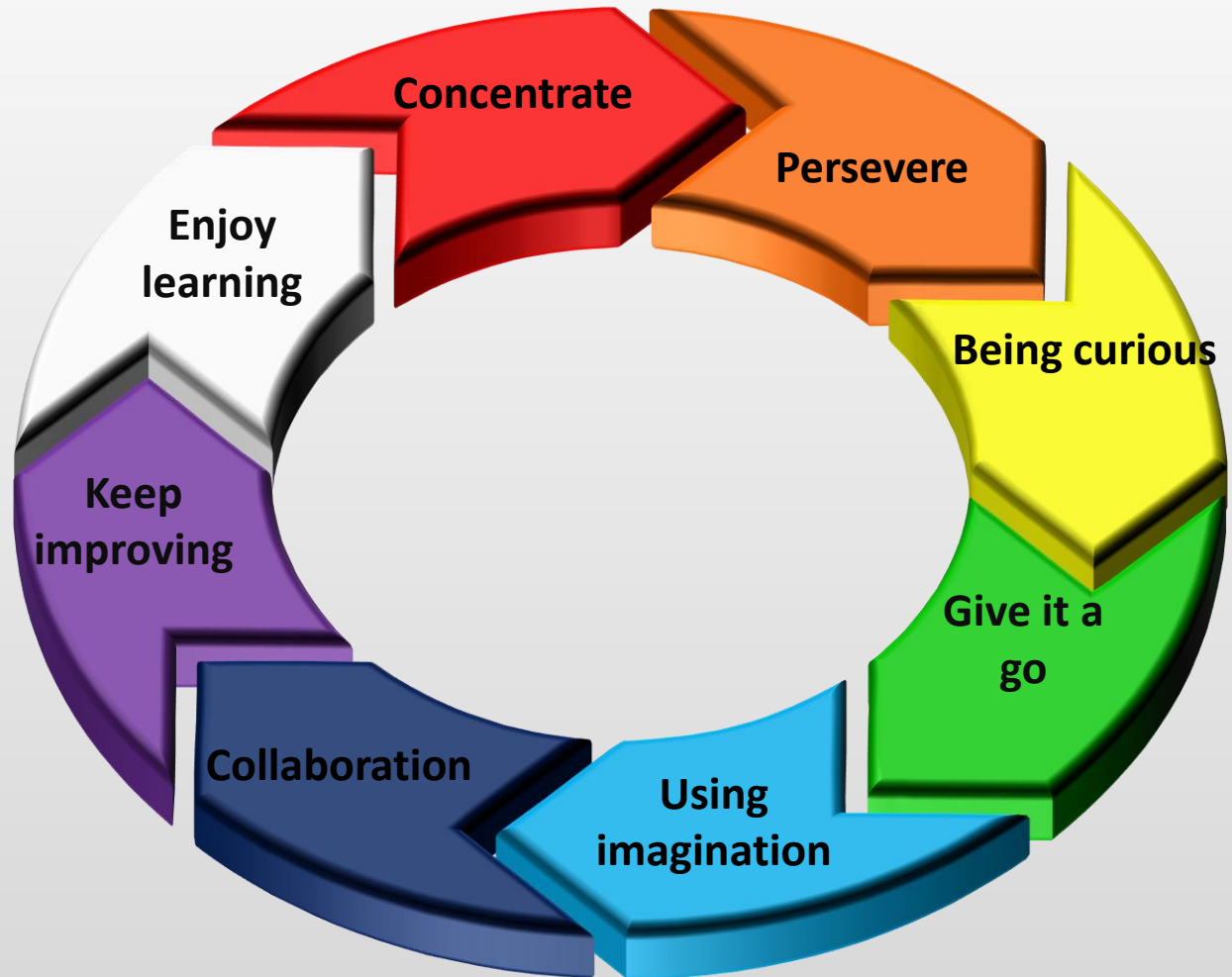
***‘Creating a Learning Powered Classroom isn’t just about creating a feeling of safety and belonging***

***It’s about purposefully cultivating an ethos that is focused around pushing yourself, self improving and enjoying the struggle of learning ‘***

***Guy Claxton***



# Learning Powers



# Learning Powers

## CONCENTRATE!

- Manage distractions
- Get lost in the task
- Do one thing at a time
- Plan and think it through
- Draw diagrams, jot down thoughts or things which will help you think

## DON'T GIVE UP!

- Work hard
- Practise lots
- Keep going
- Try new strategies
- Ask for help
- Start again
- Take a brain break

## BE COOPERATIVE!

- Listen to others
- Say when you don't understand
- Be kind when you disagree
- Explain things to help others
- Be tolerant

## BE CURIOUS!

- Ask questions
- Notice things
- Look for patterns and connections
- Think of possible reasons
- Research
- Ask 'What if...?'
- Be creative
- Let your imagination go
- Think up new ideas

## KEEP IMPROVING!

- Keep reviewing your work
- Identify your best bits
- Improve one thing first
- Try to be better than last time
- Don't compare yourself to others
- Take small steps

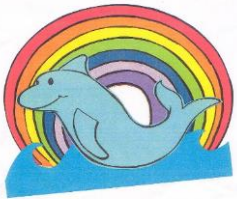
## ENJOY LEARNING!

- Feel proud of all your achievements
- Feel your neurons connecting!
- Imagine your intelligence growing by the minute!
- Use what you have learnt in real life
- Know you can do it if you have input and you practice

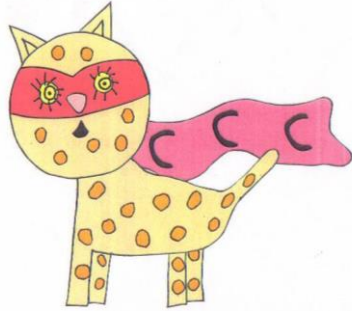




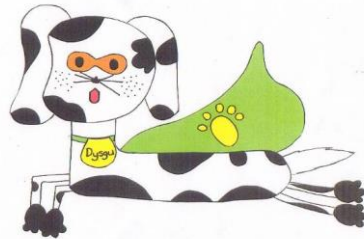
**Charli'r Llewpart Hela  
sy'n 'Canolbwyntio'**



**Dani'r dolffin sydd byth  
yn rhoi'r gorau iddi**



**Kate y Gath sy'n 'Cydweithredu'**



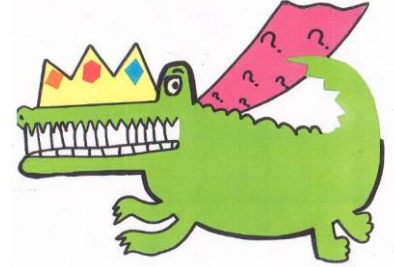
**Dylan y ci sy'n dysgu**



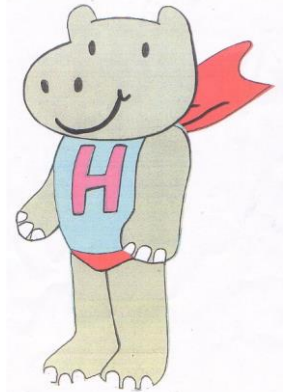
**Kevin y Cŵn sy'n 'Dal ati Wella'**



**Disney'r ddraig sy'n  
'llawn dychymyg'**



**Cyrnol y Crocodeil  
'Chwilfrydig'**



**Hari'r Hipo sy'n  
'rhoi tro arni'**

**Meddylfryd o Dwf/  
Growth Mindset**

**Pwerau Dysgu  
Learning Powers**

## **Ystyriaethau... Considerations...**

**Iaith y dosbarth ac ymddygiad athrawon  
Classroom language and teacher behaviour**

**laith y dosbarth a'i effaith/ Classroom  
language and its impact**

***'Get everybody talking  
learnish'***

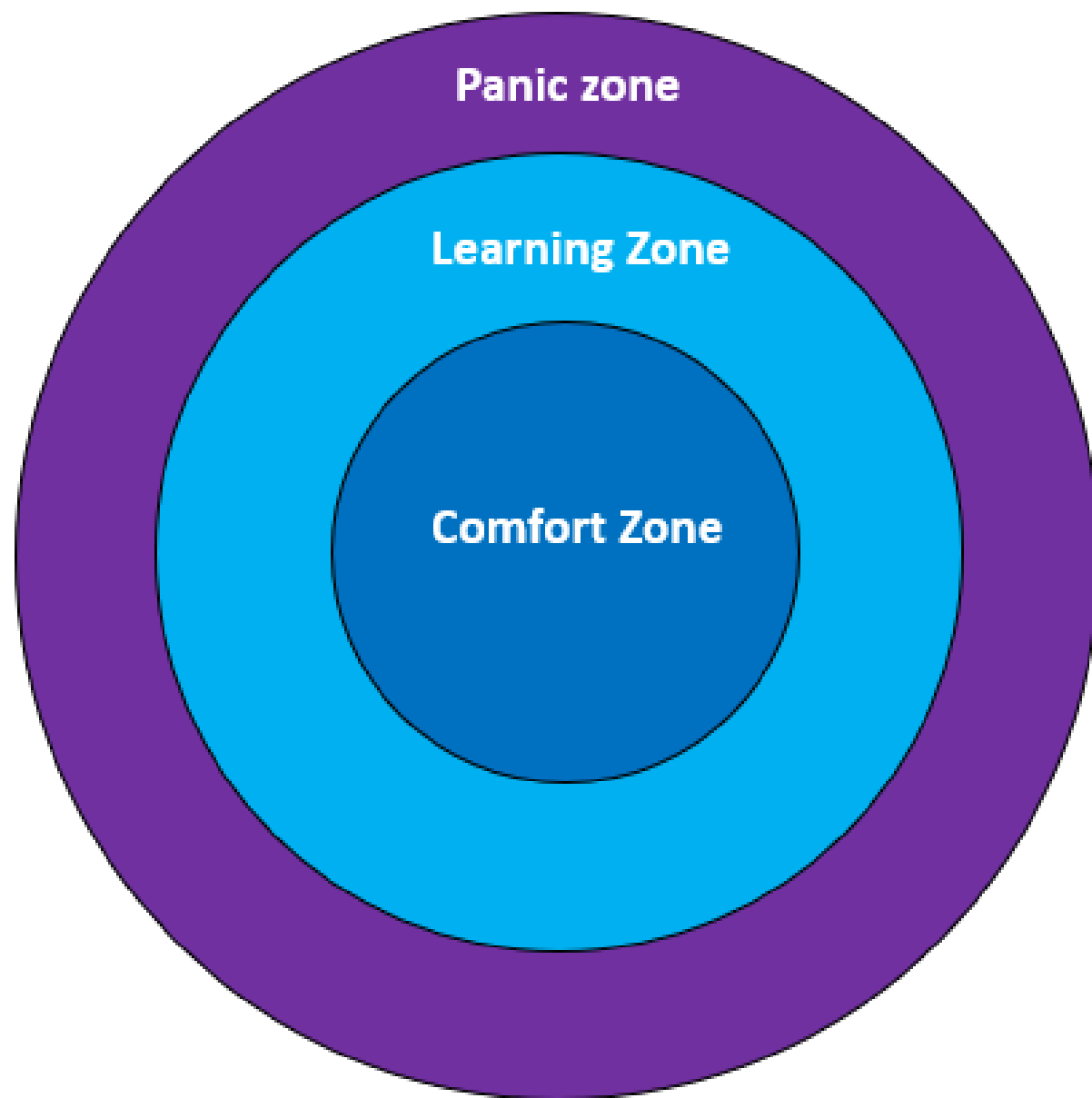
***Guy Claxton***

***'Live it , not laminate it '***

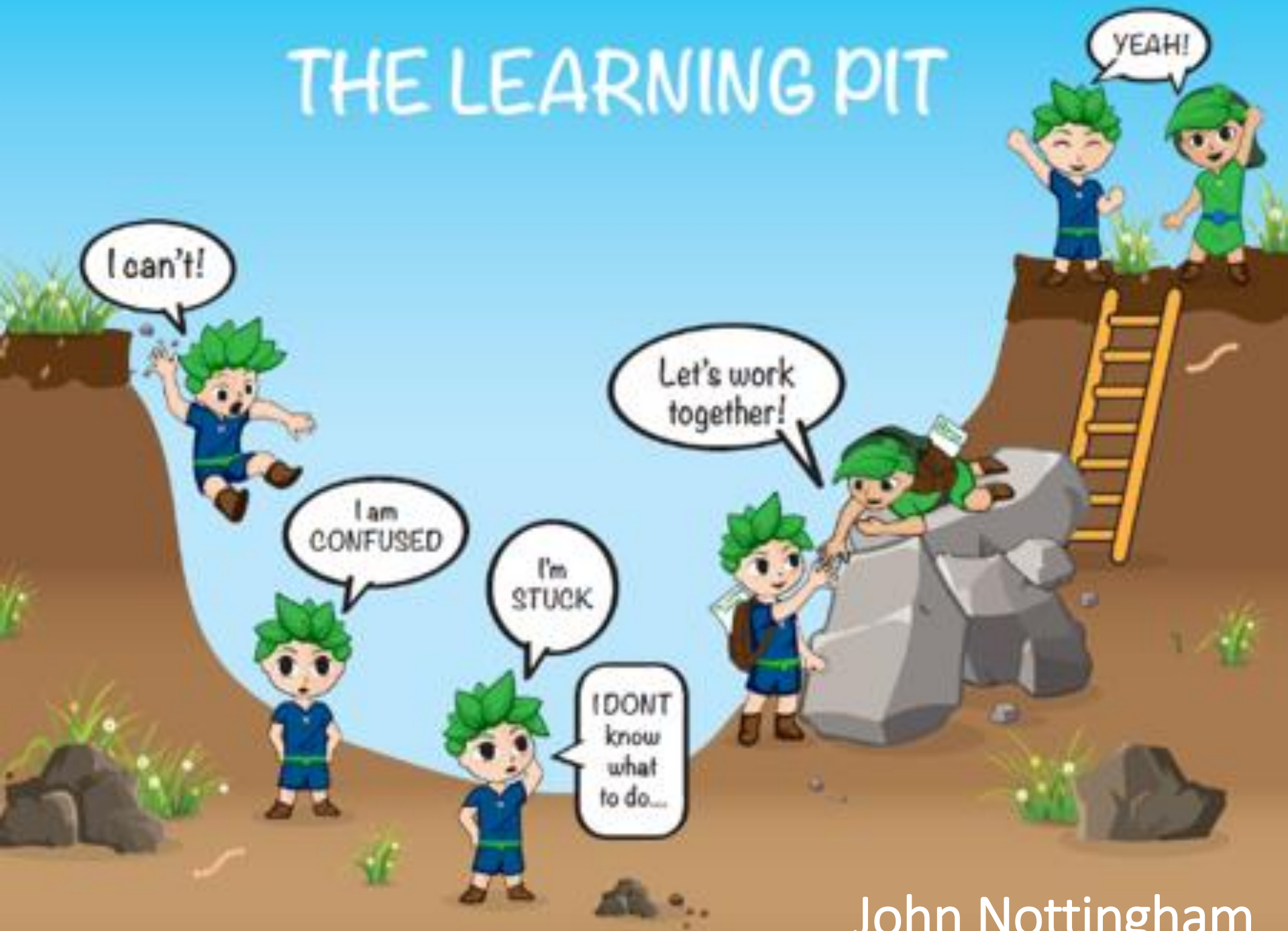
***Guy Claxton***

***'To build growth mindsets we have to change the  
cultural mindsets in our classrooms . We have to act and  
talk in ways that demonstrate our belief that all  
students can and will get smarter , and set the tasks  
accordingly.'***

***' "Growth Mindset lite" approach has little or no effect'  
Ron Berger***



# THE LEARNING PIT



John Nottingham





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Collaborating • Learning • Succeeding

# Talk Partners



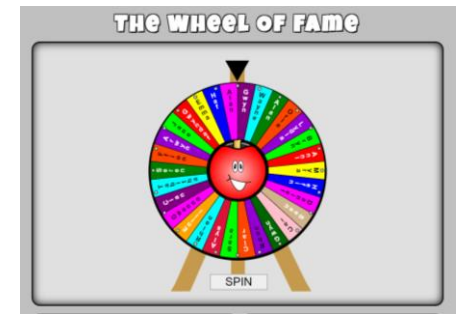
# VISIBLE LEARNING- John Hattie

Assessment literate students	1.44
Providing Formative evaluation	0.9
Classroom discussion	0.82
Teacher/ student relationships	0.75
Feedback	0.72
Meta-cognitive strategies	0.69
Homework	0.29
Class size	0.21
Within class grouping	0.16
Ability grouping	0.12
Moving schools	-0.34

# Implement

- Randomly selected
- Change partners weekly
- Train pupils to implement
- Plan for talk partner activity in lessons
- Use several times in a lesson for short and longer periods

# How?



## [Random Student Generator \(transum.org\)](https://www.transum.org/)

- *Looking for various ways to choose random partners*
- *Explain the procedure to the learners (help to learn better, make new friends, learn from each other)*
- *Start Monday morning. Change seating/ partners weekly*
- *Co- Construction of classroom Success Criteria- classroom displays, modelling by adults*
- *Appreciation cards at the end of the week*
- *Hands up- just to ask a question*
- *Discuss one thing at a time- quick discussions- more effective*

## [ClassTools.net: Free Tools for Teachers and Students](https://www.classtools.net/)





# Partneriaid trafod

dim siarad ar draws

canolbwyntio

trio ein gorau

parchu

siarad yn glên

Beth sy'n gwneud Partner Trafod da?

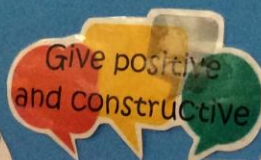
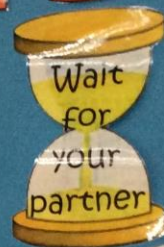
gwrando

cysylltu pengliniau, llygaid, ymennydd

cadw dwylo i ni ein hunain

dim chwerthin am ben eraill

# Talking Partners





# Impact

- Teachers talk less and listen and so gain better knowledge on many pupil's understanding and misconceptions
- Leads to more direct feedback and enables teachers to adapt their teaching to ensure pupils' progress in the moment in class
- Deepens pupil learning, understanding and remembering by giving voice to their thoughts
- Learning from peers - another child's learning enriches and confirms the learning
- An opportunity for all children to taste success - strengthening self image and confidence

# Impact

- No labeling - more inclusive. Every child brings different strengths to the partnership
- Improvement in behaviour
- Great increase in engagement and motivation - empowering pupils
- An increase in teamwork and effective collaboration
- Maturity in relation to pupils' work in the classroom
- Increased self-image
- New friendships
- Pupils respect each other and their efforts better

# What learners say ...

I think it is good that we can cooperate with anyone, then people don't just want to work with their best friend all the time and you can work with people you might not normally work with

11 year old

The children are more tolerant of each other; the language they use has shifted and it seems as if we are on the same team. There is less of a hierarchy in the class and everyone's ideas are valid, not just the high achievers. Children seem to have realised they are more equal and they are willing to work with anyone

Teacher

# What learners say ...

I like it when I sit with my talk partner because I listen better and don't fidget!

4 year old

Talk partners work well because you share ideas and compromise. You understand things better  
14 year old

When we do something with a learning partner, it is good because you get double the ideas and your work is doubly better!

8 year old



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# Eliminating ability grouping





‘Ability grouping has minimal effects on learning outcomes and profound negative equity effects.’

(0.12) Hattie, J. 2009

‘The evidence is robust and has accumulated over at least 30 years of research .....If schools adopt mixed ability, they are more likely to use inclusive teaching strategies and to promote higher aspirations for their pupils.’

Sutton Trust Report 2011

‘These studies have repeatedly found that the more schools group by ability, the lower the pupil performance overall.’

*PISA studies (2012)*

*‘Researchers in England (Dixon. A Editorial FORUM, 2002) found that 88% of children placed into ability groups at age 4 remain in the same groupings until they leave school. This is one of the most chilling statistics I have ever read’*

Joe Boaler, *The Elephant in the Classroom*, 2009

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- Detrimental to the progress of most pupils and has a direct impact, usually negatively on their mindset
- When grouped by ability- expectations placed tend to be fixed. Pupils' achievement matches those expectations
- When given opportunities to explore higher-level learning, pupils often surprise teachers by surpassing previous expectations
- Lower- ability table=negative self- belief
- Higher- ability table=complacency, fixed mindset, fear of failure

- **For mixed ability classes to work well, two critical conditions need to be met:**
- The students must be given open work that can be accessed at different levels and taken to different levels
- Students are taught to work respectfully with each other'

Joe Boaler The Elephant in the Classroom, 2009

