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Collaborating · Learning · Succeeding

# Formative Assessment

*Creating a successful teaching and learning climate and culture*



Just asking ....

**Why did you chose teaching as a career?**

**What do you enjoy about your work?**

**What are your values as a teacher?**

## **Just asking ....**

**What is it like to be a young person in your class / your lessons? How about other classes in your school?**

**What is your class like? Is it as you would like it to be? Is it a comfortable place for you as a teacher?**

**How important is it to you to keep learning/ to research?**



# GwE and Shirley Clarke Formative Assessment Action Research Project

- **Tier 1 ( October 2017 - Nov 2018)**

Formative Assessment Action Research Teams led by Shirley Clarke

**Tier 2 (Sept 2018- Sept 2019)**

Formative Assessment Action Research Teams led by Tier 1 and GwE following Shirley Clarke's work

**Tier 3 (Sept 2019- Sept 2020... 2021)**

The remainder of the schools in the region.

Formative Assessment Action Research Teams led by Tier Tier 1, 2 and GwE following Shirley Clarke's work

## Objectives

- Raise and ensure consistency of the quality of teaching across the region and within schools
- Build capacity and expertise across the region to self-improve and collaborate in pedagogy
- Form teams of teachers to be action researchers, with the expectation that they will experiment with formative assessment throughout and beyond the project, and report back on their findings.
- Keep teachers up to date with recent research findings on formative assessment
- Support teachers as they review and adapt their current practice and develop their confidence and expertise in the field so that they can eventually lead others.
- Sharing and celebrating successes and passion for teaching

**All this with an eye on Curriculum for Wales**



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# The Numbers

	Schools	Teachers
<b>Tier 1</b>	<b>27</b> <b>(22+5)</b>	<b>54</b>
<b>Tier 2</b>	<b>193</b> <b>(168+22+3)</b>	<b>386</b>
<b>Tier 3</b>	<b>140</b> <b>(117+17+7)</b>	<b>261</b>
<b>TOTAL</b>	<b>360</b>	<b>701</b>

***Headteacher's conference March 2019 - 360 attended***

**89% o region's schools**

**17,500 pupils**

96% Primary

80% Secondary

70% Special

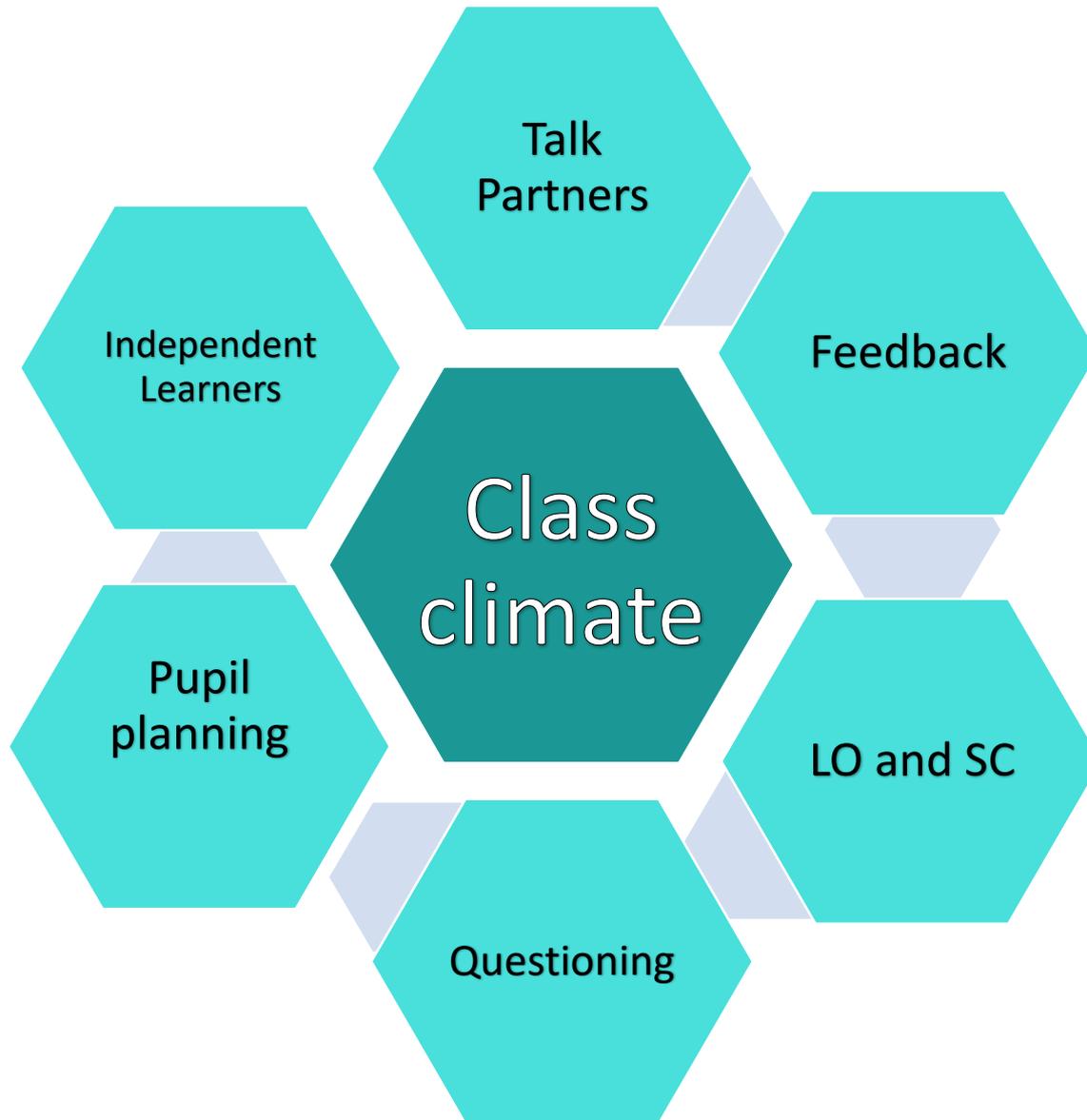
## **Formative Assessment is...**

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*

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

***Ausubel (1968)***



# Curriculum for Wales 4 purposes





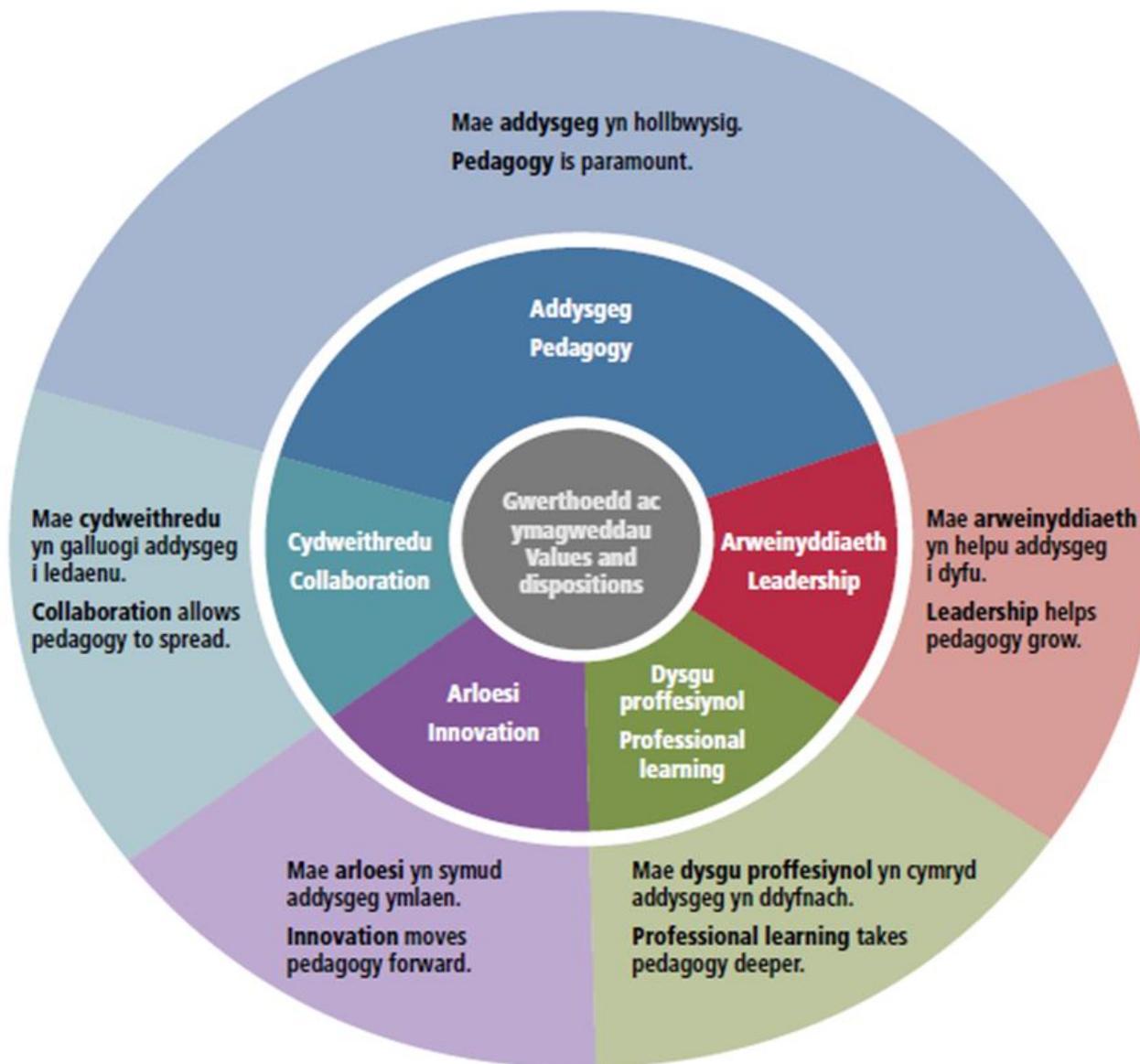
# 12 Pedagogical Principles

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

# Professional standards for school practitioners in Wales





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

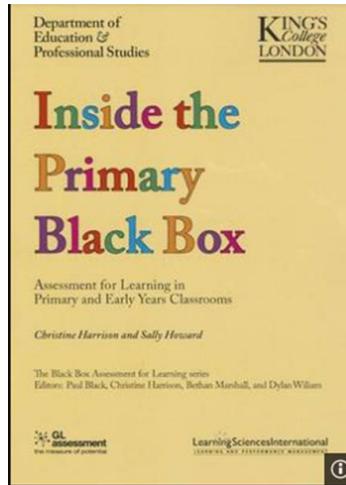
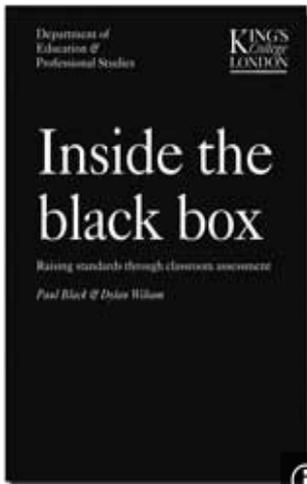


Tuag at Ragoriaeth  
Towards Excellence



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.”

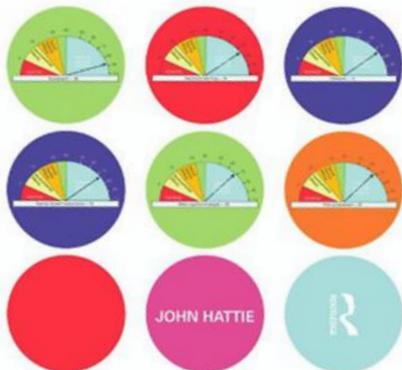
— Dylan Wiliam,  
Embedded Formative Assessment



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# VISIBLE LEARNING

A SYNTHESIS OF OVER  
800 META-ANALYSES  
RELATING TO ACHIEVEMENT



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Shirley Clarke

# Outstanding Formative Assessment

Culture and Practice



WITH ONLINE  
VIDEO CLIPS

**HODDER**  
EDUCATION  
LEARN MORE



# EMBEDDING FORMATIVE ASSESSMENT



*Practical  
Techniques  
for K-12  
Classrooms*

**DYLAN WILIAM**  
**SIOBHÁN LEAHY**

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**R**

# VISIBLE LEARNING FOR TEACHERS

MAXIMIZING IMPACT ON LEARNING

**JOHN HATTIE**



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UPDATED EDITION

MILLION-COPY BESTSELLER

*'Essential  
reading for  
anyone with  
ambitions'  
WILLIAM CRICK,  
author of  
'Bounce'*

# mindset

Changing the way you think to  
fulfil your potential

DR CAROL S. DWECK

# VISIBLE LEARNING FEEDBACK

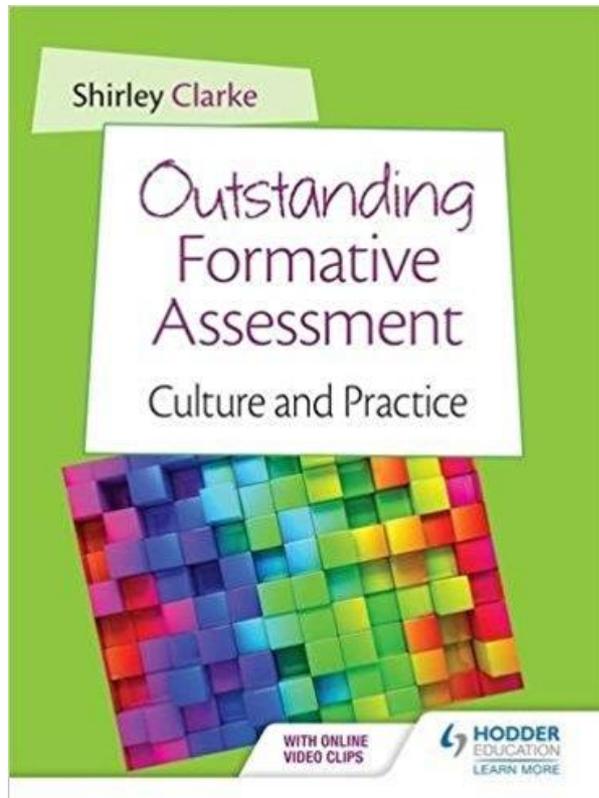
JOHN HATTIE and SHIRLEY CLARKE



**R**

## 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
<hr/>	
Homework	0.29
Class size	0.21
Matching styles of learning	0.17
Ability grouping	0.12
Moving schools	-0.34



*“Whatever the learner’s age, the curriculum demands, the subject, the educational setting or testing arrangements, formative assessment is always relevant, as it revolves around the only focus that makes any sense: the empowerment of the learner. Once this becomes the prime focus of every teacher and pupil, with formative assessment as the driving and guiding force, outstanding achievement is not only possible, but highly probable.”*

# “Conditions to be able to function as an active learner” - Shirley Clarke

- 1. Culture of learning, emotional support , climate ,**
  - *Growth Mindset*
  - *Metacognition*
  - *Mixed ability teaching*
- 2. Learners to play a part in planning**
- 3. Talk partners**





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## Establishing classroom climate and culture for Formative Assessment

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





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## **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

***“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”***

# 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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<b>Fixed Mindset</b>	<b>Growth Mindset</b>
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
Likely to plateau early and achieve less than full potential	Reaches ever higher levels of achievement



Carol Dweck

# Ability Myths

## **Ability is something.....**

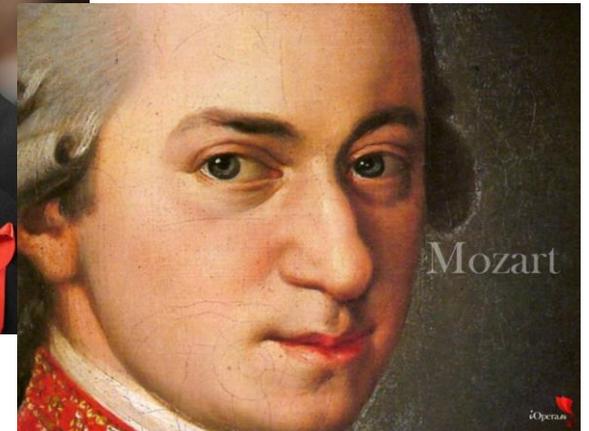
- We are born with (or without) as part of our genetic inheritance;
- Child prodigies have a prodigious amount of;
- That doesn't change much over time

## **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 the high ability needs unusual levels of motivation and practice

## Key ingredients:

- Opportunities to develop particular skills;
- Strong motivation;
- Extensive, deliberate practice;
- Good coaching and teaching



“Genius! For 37 years I’ve practised 14 hours a day, and now they call me a genius!”

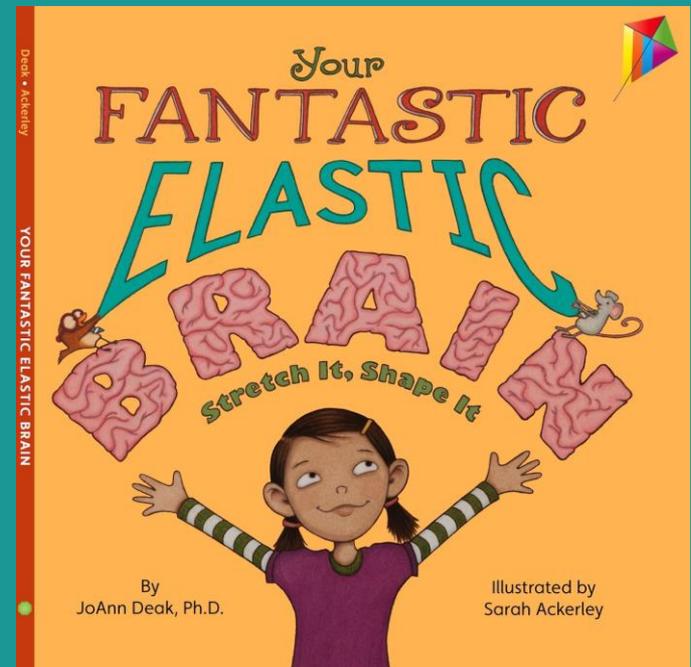
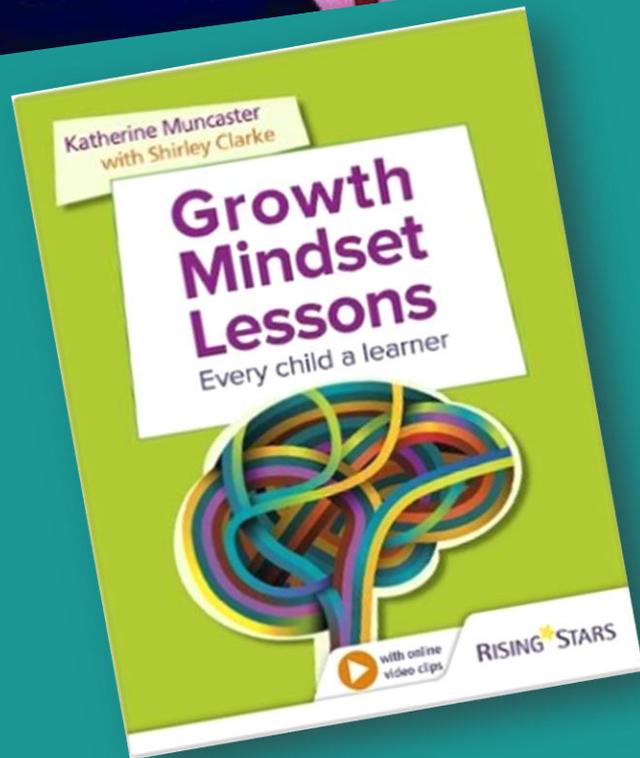
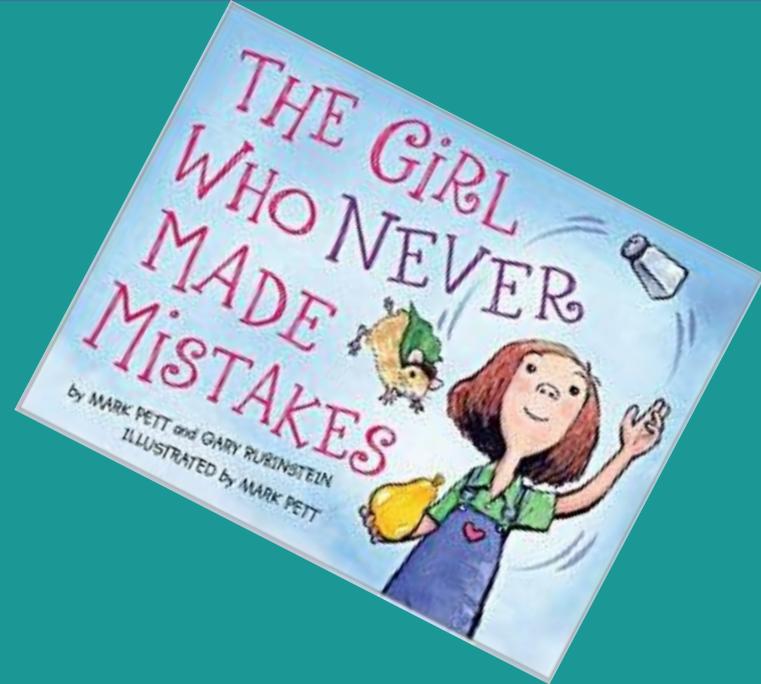
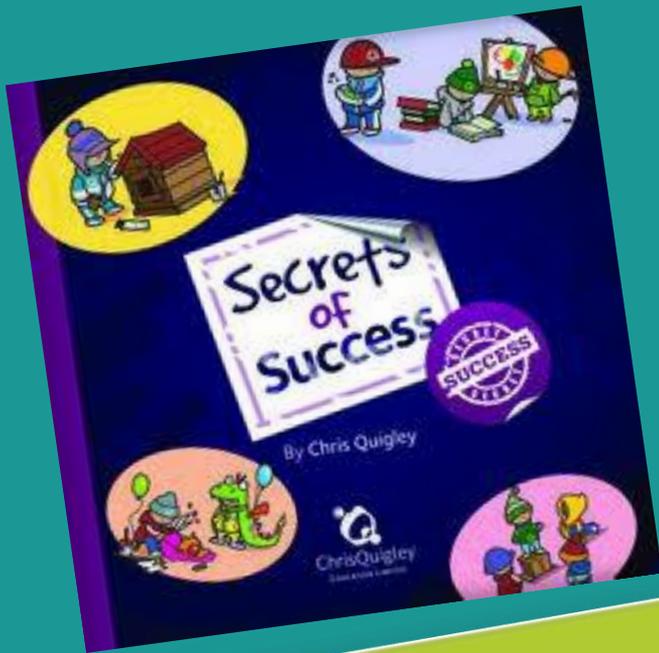
*Pablo Sarasate, violin virtuoso, 1895*

**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



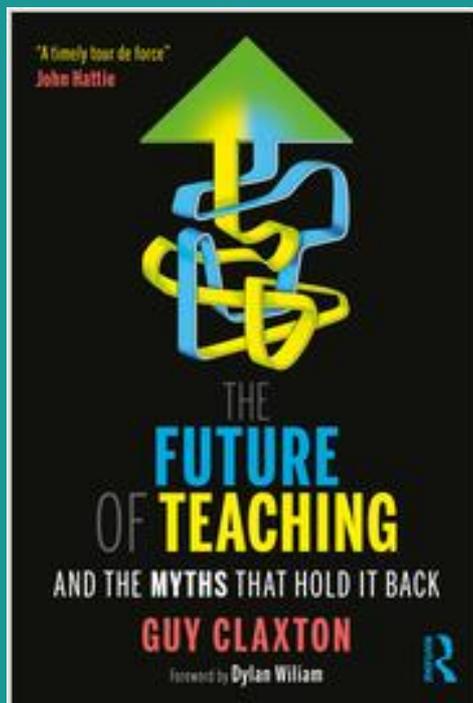
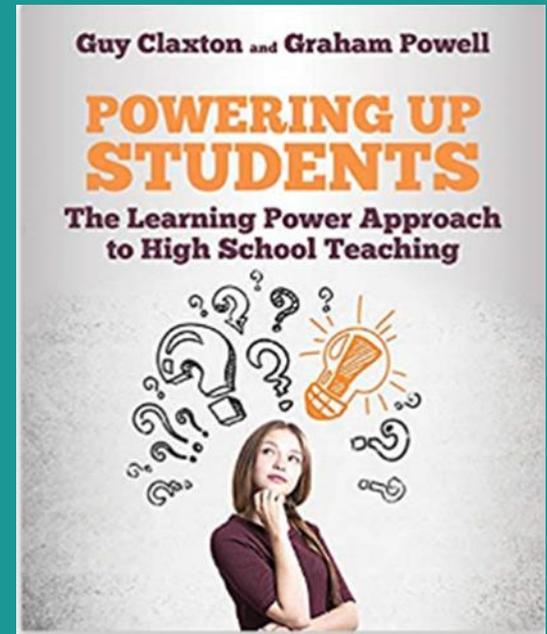
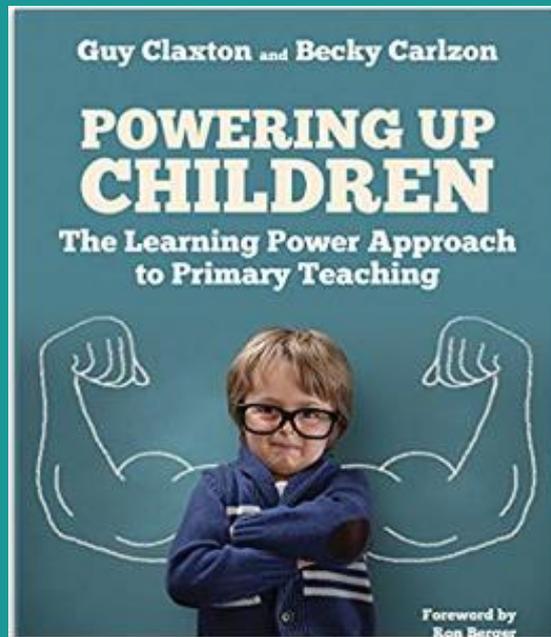
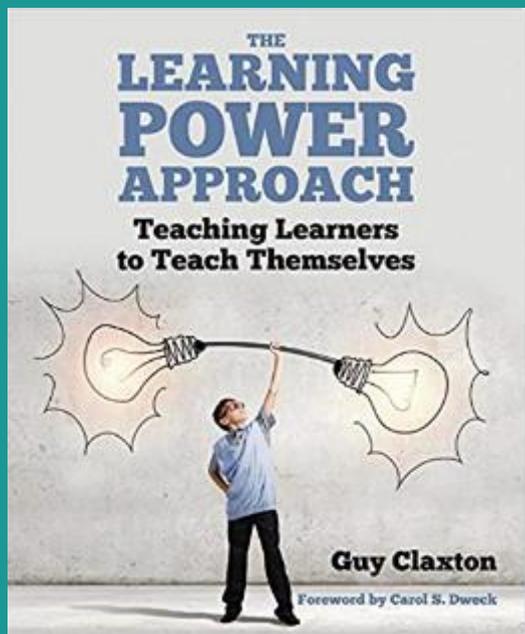
# Growth Mindset- Carol Dweck

- We are all a mixture of both a growth and fixed mindset - teachers and learners

## What causes a fixed mindset ?

Facing a challenge	Anxiety/ self doubt
When things go wrong	defensive, lose patience
Receiving criticism	Angry, defensive
Seeing somebody else succeed	Jealous, reduced motivation

- If the teachers are in a fixed mindset, learners will be too , the same for a deadteacher and staff
- ‘Talk the talk and walk the walk ‘

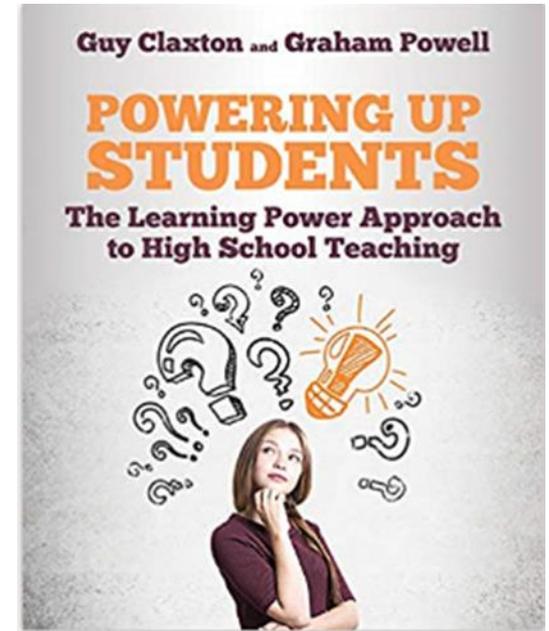


## Learning Powers - Guy Claxton

***‘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***



‘...major contribution to our understanding of how teachers can prepare young people not just for a life of tests but for the tests of life’

***John Hattie***

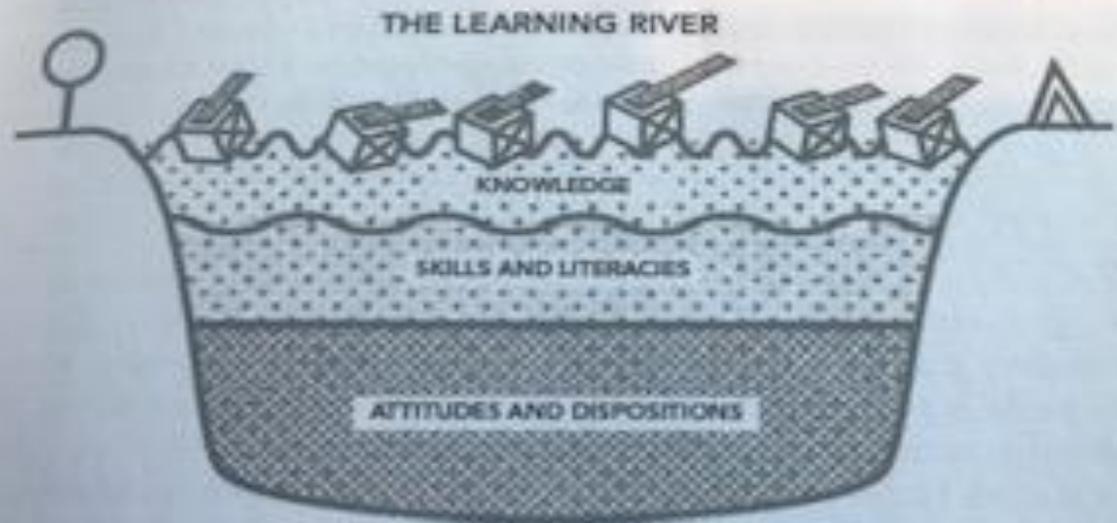
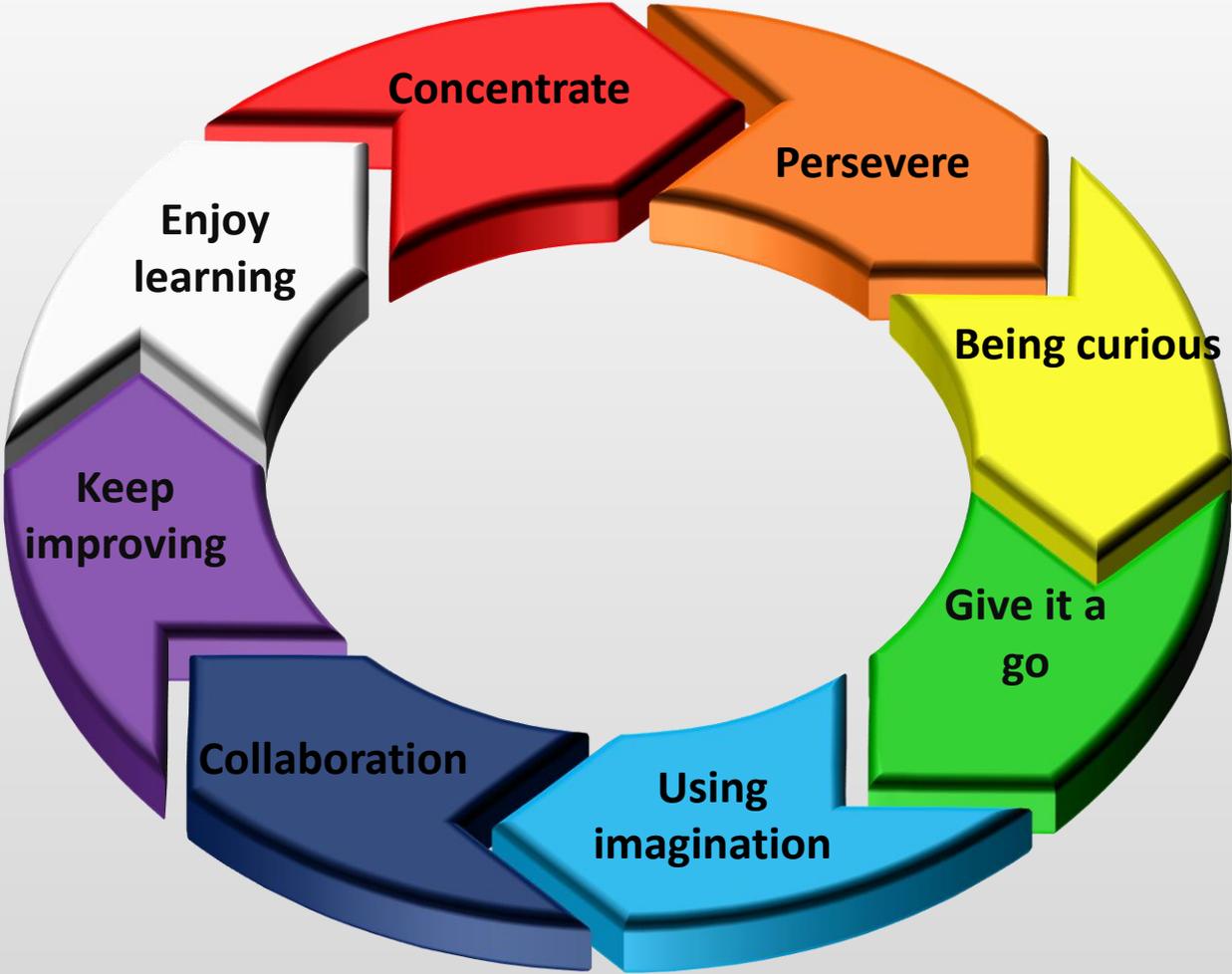


Figure 1.1: The Layers of Learning in the Classroom

Source: By kind permission of Juan and Becky Carlzon

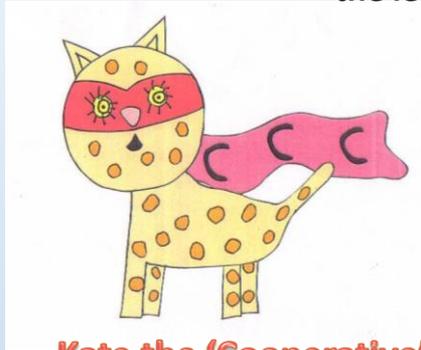
# Learning Powers



The children designed their own super heroes to represent the learning powers



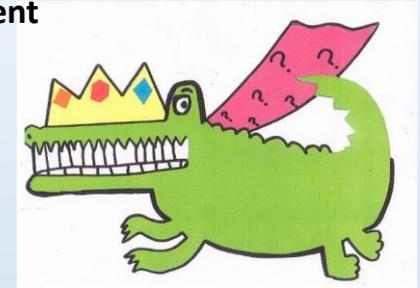
Charlie the 'Concentrating' Cheetah



Kate the 'Cooperative' Cat



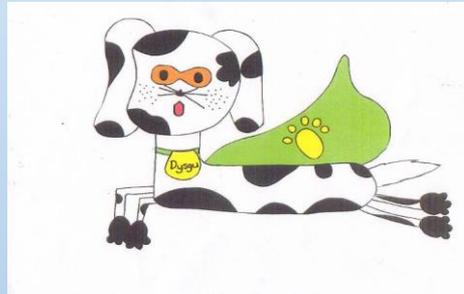
Kevin the  
'Keep Improving' Kiwi



Colonel the  
'Curious' Crocodile



Danny the 'Don't give  
up' Dolphin



Dylan the Dysgu Dog



Disney the 'Imaginative' Dragon



Harri the 'Have a go' Hippo

**Growth Mindset**

**Learning Powers**

**Considerations ...**

**Class language and  
teacher behaviour**

## **Class 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***

# Learning Language

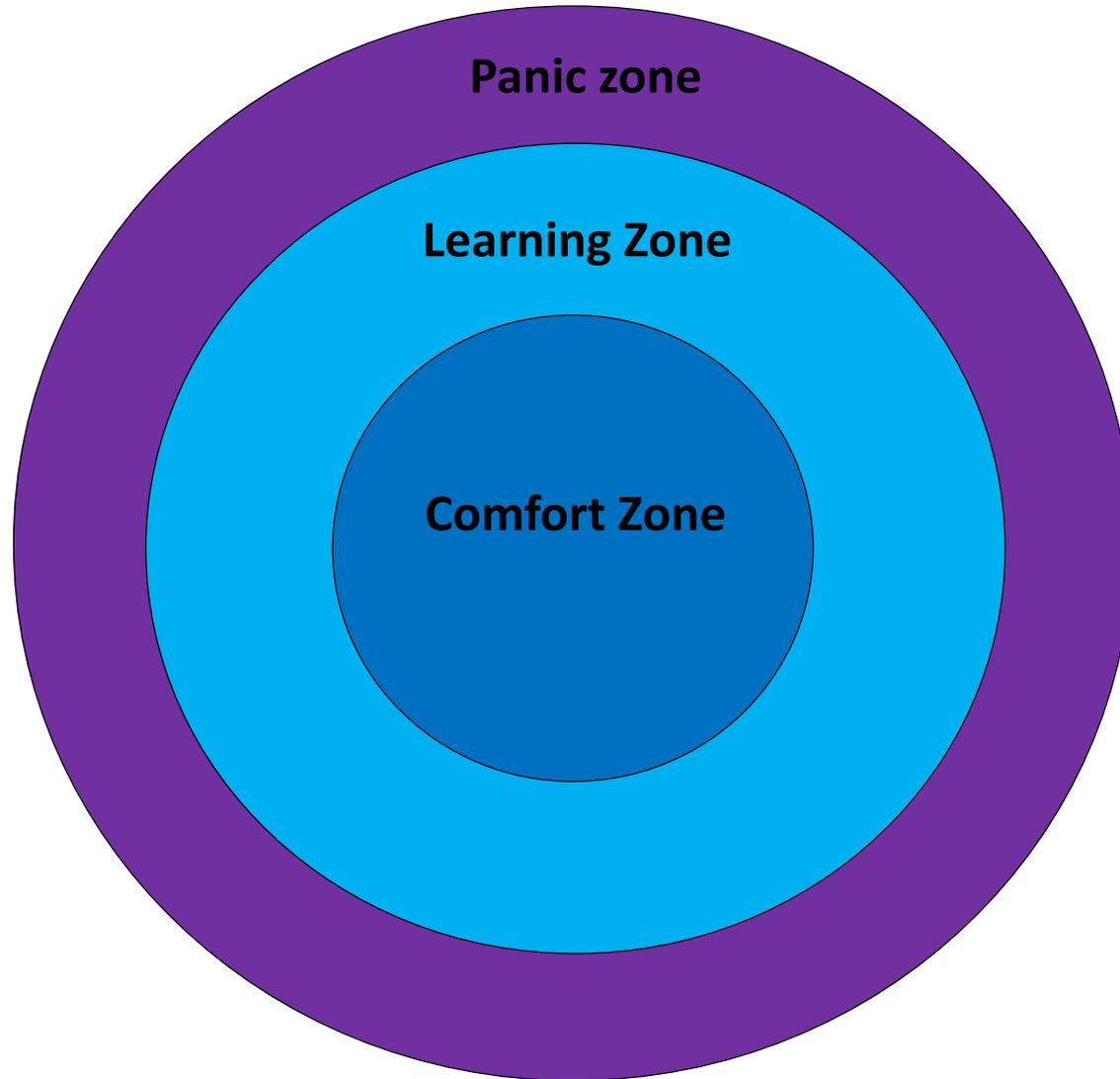
- Refrain from reference to **'work'**, call it **learning**
- **'What is'** - closes th mind - **'what could'** opens it e.g. What could the solution to this problem/ the answer be ?
- The power of 'yet'
- Let's say .... What if .....
- Could be
- How come? I wonder....
- **Improve/ Improve your ability to...** instead of **correcting your mistakes**
- Rethink your language around ability – higher ability, talented gifted, naturally good at , less able , weak, also targets and lefels - what about the 'person' / the learner
- Don't act as if you know what a child is capable of reliably and accurately

# In the innards of learning

- *What's your plan for tackling this*
- *What could you try?*
- *What exactly is it that you don't understand?*
- *How did you do that?*
- *Are you OK to keep going for a bit?*
- *How could you help somebody else understand that?*
- *What are the tricky bits? What's tricky about them?*
- *How could I have taught you better ?*
- *How could you make that harder for yourself?*
- *Congratulations for focusing in spite of all the things that may have distracted you*
- *Let's try to find out exactly what makes this difficult for you, and what can help you get it*

## Less emphasis on looking for the right answers

- *Discuss the value of mistakes*
- *'Very interesting'*
- *What brought you to that solution?*
- *How did you get to that?*
- *Why did you solve the problem in that way?*



# Learning Pit - John Nottingham:



RATHER THAN SAYING:	TRY TO THINK ... AND SAY:
I'm not good at doing this	Have I missed something?
I'm not going to try anymore	I'm going to try a different strategy
It'll do	Is this the best I can do
I can't do any better than this	There's always room for improvement
This work's too difficult	This is going to take time
I've made a mistake	Mistakes help us learn
I can't do this	I'm going to train my brain
I'm not that clever	I'm going to learn how to do this
The first attempt didn't work	Now I'm going to try the second attempt
My friend can do the work	I'm going to learn from my friend

# Project teachers

- Children challenge themselves to a greater extent in math lessons. Attitudes towards learning in all curriculum areas are more positive
- Growth Mindset is developing to be the subject of discussion in the staff room as well as the subject of discussion among pupils. The language of Growth Mindset is being set up to a greater degree across the school
- Children are aware of the type of learners they are, and as a result, can change attitude / mindset when necessary

# Project teachers

- We celebrate class mistakes and emphasize the fact that we learn from mistakes. This makes the children more confident when venturing to complete tasks independently knowing that we will learn by looking at each other's mistakes.
- In some cases the most challenging part of this is to change the thinking of teaching staff. All staff must demonstrate their own growth mindset before they can develop it in their pupils.



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# Talk Partners



# Effective implementation of Talk Partners

- Discuss with pupils/explain note the importance of sharing their learning
- Random selection
- Change weekly( every 3 weeks secondary)
- Classroom layout so all face front
- Young children to sit on carpet face each other – model Talk partners
- Generate class success criteria for Talk Partners
- Train and provide plenty pf practice oppportunities
- Share experiences after experimenting experiences (initially weekly) Staff may need to do this too.
- 3s for language support

# Possible SC for talk partners

- Good eye contact
- Take turns
- Listen carefully
- Be courteous
- Wait for your partner to finish
- Tell your partner what you liked about working with him/her.

# Partneriaid trafod

dim siarad ar draws

canolbwyntio

trio ein gorau

parchu

siarad yn glên

Beth sy'n gwneud Partner Trafod da?

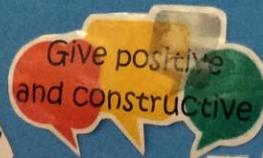
gwrando

cysylltu pengliniau, llygaid, ymennydd

cadw dwylo i ni ein hunain

dim chwerthin am ben eraill

# Talking Partners



# Talk partners in action

- Implement throughout school - no one too young or too old
- Foundation Phase pupils - "Link eyes, link hands link brains"
- Pupils to sit with their talk partners in each lesson.
- Ensure partner activity in your lessons when planning
- Use several times in a lesson for short periods e.e. 30 seconds to talk to your partner
- Longer sessions too - feedback, work scrutiny etc.
- "Compliment slip" at the end of the week - feedback to the partner

One week my talk partner was someone a that I can be silly with. I thought yn teacher wouls not let t happen but she said that talk partners always stayed with who was pulledout of the hat. We worked really well together and surprised everyone

Talk partners are really helpful because sometimes I do not know the answer to a question straight away and talking to someone else about it means I can get to the answer without being told it'



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# Eliminating Ability groups



# 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
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Homework	0.29
Class size	0.21
<b>Within class grouping</b>	<b>0.16</b>
<b>Ability grouping</b>	<b>0.12</b>
Moving schools	-0.34

# Ability Grouping - the evidence against

‘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)*

‘Highly controlled studies suggest that ability grouping has little overall effect on students’ academic performance.....Greater use should be made of peer co-learning, since these approaches can enhance the learning of all pupils.’

*Baines, Ed (2012)*

*'The adoption of structured ability groupings has no positive effects on attainment but has detrimental affect on the social and personal outcomes for some children'*

The Primary review, 2008

*'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

# Differentiated challenges



# When are practices embedded?

Where are you?

I do it already, intuitively and flexibly

I do it sometimes, but we can do more

I don't do it, but I'd like to

I don't want to do it

