

# Strategies for developing a growth mindset culture

## Intelligence

As the belief that your intelligence is limited is a critical barrier to having a growth mindset, it is useful to engage children and adults in a discussion about the nature of intelligence. Many teachers have found the following task very successful:

Arrange these famous people in order of intelligence:

Albert Einstein, J.K. Rowling, David Cameron, David Beckham, Justin Bieber (or similar!)

### VIDEOCLIP TASTER #2 Ordering celebrities for intelligence

An insight into 8 and 9 year old children's perceptions of intelligence.... <http://bit.ly/1fnYWRa>



It is interesting to see how many different definitions of intelligence emerge and the different ways the famous people can be ordered according to those definitions. Common criteria given include academic achievement, making money, getting a long way from where you started, a subject excellence, social skills, and impact on society. Children gradually realise that intelligence can mean many things. The book *All Kinds of Ways to be Smart*, by Judy Lalli, is a popular follow-up to this activity. Of course, we need to beware of children pigeonholing themselves into only one way of being 'smart'. The emphasis needs to be the fact that intelligence is not just academic.

A teacher from a Kentucky elementary school described what happened when she presented the task to a class of 8 year olds:

Students worked in groups of four. I showed the whole class pictures of the famous people and explained who each person was: Tiger Woods, George Washington, Aly Raisman, Walt Disney, Barack Obama, Thomas Edison, Christopher Columbus, J.K. Rowling, Michael Jordan, Taylor Swift.

They were instructed to put these pictures in order of intelligence. Some comments I overheard:

- *'I don't think a president should go at the end.'*
- *'But she won a gold medal!'*
- *'You don't have to be really smart to play basketball.'*
- *'She was poor and then she became famous.'*
- *'The presidents should be together.'*
- *'But she's the most famous!'*
- *'The paparazzi would like her more.'*

Behaviour I noticed:

- Students who were normally ‘pushovers’ were adamant about their opinions and would back up their beliefs.
- They naturally compromised to determine the order.
- The most popular people for this generation were not necessarily at the top.
- They were really thinking about their justifications.

I then read a book called *All Kinds of Ways to be Smart*, by Judy Lalli. We discussed ‘smartness’ in different areas: word, logic, picture, music, nature, body, self, people. There is not just one way to be smart. We also discussed what each of the people had to do to accomplish what they have and also how they had to excel in different areas.

I learned:

- I need to give more opportunities to work in this manner – compromise, negotiation, open-ended activities, not necessarily math content with right or wrong answers.
- Kids can really handle this and can learn from it.
- I need to *LISTEN* to them more. They have a lot to say and need to be heard.

Lori Riney, Washington County Elementary School, Springfield, Kentucky.

## Current mindsets

Carol Dweck’s book *Self-Theories* (2000) contains some useful questionnaires in the appendix which can be given to children to try to gauge their current mindset. Her website also contains surveys for children. The following list is particularly pertinent, although probably appropriate only for older children. Children agree or disagree with the statements:

1. *I like school work that I’ll learn from, even if I make a lot of mistakes.*
2. *I would feel really good if I were the only one who could answer the teacher’s questions.*
3. *An important reason for doing my school work is because I like to learn new things.*
4. *It’s very important to me that I don’t look stupid in class.*
5. *I like school work best when it really makes me think.*
6. *It’s important to me that the other children in my class think that I’m good at my work.*
7. *An important reason why I do my work at school is because I want to get better at it.*
8. *An important reason for doing my school work is so that I don’t embarrass myself.*
9. *I do my school work because I’m interested in it.*
10. *I want to do better than other children in my class.*

For young children, differentiated mazes (downloadable from the internet) or different jigsaws have proved useful in finding out what children feel about their abilities. Children who head towards the hard jigsaw or the complicated maze are more likely to have a growth mindset.

## Making mindsets accessible

Once the baseline is roughly cast, the next step in creating a class or school-wide growth mindset culture is to give children the facts about the brain and the mindsets, in whichever way suits the age the best. I have seen fake brains, displays of neurons connecting, characters and puppets, white mice and any number of devices to get the information over to the children. The children's book *Your Fantastic Elastic Brain*, by JoAnn Deak, is a great resource for explaining the workings and potential of the brain.

A commonly used *YouTube* clip, 'Famous Failures', gives a very clear message that you can grow your intelligence. Some excerpts:

- ▶ *He wasn't able to speak until he was 4 years old and his teachers said he would 'never amount to much'* (Albert Einstein, theoretical physicist and Nobel Prize winner)
- ▶ *Was demoted from her job as a news anchor because she 'wasn't fit for television'* (Oprah Winfrey, host of a multi-award-winning talk-show and the most influential woman in the world)
- ▶ *Fired from a newspaper for 'lacking imagination' and 'having no original ideas'* (Walt Disney, creator of Mickey Mouse and winner of 30 Academy Awards)

One teacher, Paula Hill from Milby Primary School in Nuneaton, tells her story of introducing the growth mindset with her 6 year olds:

I started my session sitting in a talking circle reading *Giraffes Can't Dance*, by Giles Andreae and Guy Parker-Rees. I had also copied onto large paper pictures of Gerald – one where he says he is useless and one where he can dance.

I read the book, drawing attention to the fact that he couldn't dance but he wanted to. I stopped reading at the part where Gerald says he is useless and asked the children to talk to their talk partner about how he might be feeling. They said:  
*'sad, unhappy, lonely, worried, shocked, left out, jealous and cross.'*

We discussed why he was feeling like that but then moved on to how he could help himself:

*'Practise, try, think you can, smile, make it easier, join in and have a go, try try and try again, keep going.'*

I continued the story, putting in their ideas as the story continued – *'Look he's having a go!'* Once Gerald had learnt to dance, the children talked again then said he felt:

*'Amazed, good, enjoying it, happy, joy, delighted, much better, excited, overjoyed.'*

I then talked about how this story relates to us all. The children talked about Gerald for the rest of the day:

*'It was fun.'*

*'Fantastic you got to think about yourself.'*

*'I enjoyed it when he said he could do it.'*

*'I didn't like it when he was a fixed learner – better when he opened his mind.'*

The impact was that the children started to talk about themselves as learners. I now have a 'stuck learner' wall with ideas.

*Giraffes Can't Dance* is one of many recommended books which encourage growth mindset thinking and can be used for classroom discussion. Some favourites listed on the Growth Mindset blog from the Mindworks website are:

- *The Dot*, by Peter Reynolds, tells of a child who believes she can't draw, but her teacher tells her to 'make a mark and see where it goes'.
- *Rosie Revere Engineer*, by Andrea Beaty, tells of a child who invents something that fails.
- *Ryan the Spy and : the SuperHero Secret*, by Jason Rago, talks about hard work and practice being the keys to success.
- *Cindersilly*, by Diana B. Thompson, is a non-traditional take on Cinderella in which she problem-solves her life.

Another teacher, Katie Walton from St Michael's C of E Primary School, wrote her own book, *I Can't Do This*, and self-published it. In her story the main character gets the better of his negative fixed mindset by adding the word 'YET' to his thought 'I can't do this'. The book is beautiful and can be obtained via her useful website [www.growthmindset.org](http://www.growthmindset.org). I now see many teachers using the addition of **YET**, on posters and in what they expect children to say in response to something they don't know or can't do. In one classroom I visited, it was inspiring to hear children saying 'I don't know yet' in response to a question, and having that response backed up by the teacher.

A Kentucky high school teacher asked her 17 year olds what 'yet' meant to them in the context of their learning:

- ▶ *'To me "yet" means I don't have the skills and knowledge right now to accomplish what I want to, but if I stay focused I can gain these skills.'*
- ▶ *'As a learner there are always concepts you have yet to come across and experiences you have yet to come. These "yets" are the border between the present and future and they are what will shape not only your knowledge but the person you will be.'*

Stephanie Harmon, Rockcastle County High School, Mt Vernon, Kentucky

Two teachers from Windhill Primary School in Hertfordshire, Phillipa Hampton and Kate Smith, created a videoclip of themselves in role as 'Madge (fixed) and Mildred (growth)' trying to build a Lego model, doing difficult versus easy sums and shooting in netball. The video is hilarious and very powerful in demonstrating the differences in approaches to the two mindsets. The teachers found this a very effective way of helping their children understand the mindsets.

One teacher of 10 year olds had introduced a 'learning journal' for the children to write their thoughts at the ends of lessons as they related to the mindsets. By looking at their comments, we have a real insight into what causes distress, how resilient they are, any patterns in their thinking and whether confidence develops over time. Figs 2.2 and 2.3 show excerpts from two children's journals.