



# ST. MICHAEL'S CE SCHOOL

## GROWTH MINDSET PRINCIPLES



Our key Growth Mindset principles are:

### **Persistence, Reflection, Collaboration and Innovation**

There is now a large consensus amongst expert researchers on how the brain learns successfully. We do not learn by passively receiving and then remembering what we are taught. Instead, learning involves actively constructing our own meanings. This literally involves the construction of connections between neurons. We invent our own concepts and ideas, linked to what we already know. This "meaning-making" theory of learning is called 'constructivism'. When you have learned something you have changed your brain physically.

Stages of "cognitive conflict" i.e. when new learning is not yet connected and doesn't fully make sense, are an important part of the process of making stronger and broader connections.

Furthermore, meaning is personal and unique, and is built upon personal prior learning and experience, which differs from child to child. There is no one way to learn something and a variety of tasks and experiences are required to meet individual need.

A useful analogy for effective teaching is sports coaching. The pupil is an athlete, and the teacher their coach. The teacher may explain, but this is not enough. The pupil must practice and develop their skills, and the teacher provides suitable activities for this, and then feedback on the performance during the practice, suggesting improvements where this is necessary. The athlete can only improve performance by training; the pupil can only improve performance by learning activities.

The constructivist theory of learning also helps to shape our understanding of intelligence. Many people (including pupils themselves) hold the misconception that intelligence is fixed - you're either able or not, you're either good or bad at maths.

Carol Dweck, Professor of Psychology at Columbia University, is a leader in the field of pupil motivation and her research is widely recognised. Over many decades she has developed a highly influential theory of pupil motivation building on the work of others notably on 'attribution theory' - what we attribute for our failures and successes. She divides pupils into two types, *based on their own theory about their own ability:*

**Fixed Mindset:** pupils who believe that their ability is fixed, probably at birth, and there is very little if anything they can do to improve it. They believe ability comes from talent rather than from the slow development of skills through learning. "It's all in the genes". Either you can do it with little effort, or you will never be able to do it, so you might as well give up in the face of difficulty.

**Growth Mindset:** pupils who believe that ability and success are due to learning, and learning requires time and effort. In the case of difficulty one must try harder, try another approach, or seek help etc.

Roughly half of us hold fixed mindsets about our intelligence, and roughly half of us hold a growth mindset about our intelligence, believing that our successes are caused by such factors as effort, application and good study skills.

Dweck's work has shown that pupils who hold a growth mindset do better in school and that teaching and developing pupils to have a growth mindset enhances their achievement. Individuals (of whatever achievement level) with fixed mindsets tend to show low levels of resilience, persistence and creative problem solving, and therefore can fail to make progress, whereas individuals with growth mindsets thrive on adversity, and grow new ways of coping and progressing.

Dweck's work also shows that how we praise pupils can have important effects on their motivation and that praising intelligence can actually undermine pupils' motivation and performance. Praise for intelligence conveys a fixed mindset, makes pupils feel afraid of challenges and leads to decreased interest and performance when tasks become difficult. Praising for process (effort, strategy and improvement) has the opposite effect: it leads pupils to take on challenges and to persevere through difficulty.

We aim to create a culture that values and develops positive learning habits, and where pupils are expected to be learning all the time. Therefore, we take an active approach to teaching children the key principles of a successful learner. Extending the analogy of the athlete "working out", we characterised four key principles and personified them as St. Michael's characters.

Our four key Growth Mindset principles are:  
**Persistence, Reflection, Collaboration and Innovation**

