

# Teaching Tenacity



Students who can overcome challenges and approach their learning with resilience, persistence, perseverance, grit and self-regulation are better equipped to achieve success in school and beyond. **Bill Lucas** and **Ellen Spencer** explain their overarching concept of ‘Tenacity’ and show how it can be learned at all stages.

## Tenacity – what it is and why it matters

Louis Pasteur famously said that the secret that led to him achieving his goals in life was his tenacity. As a student he initially had indifferent results at both school and university. Yet dogged persistence and resilience led him eventually to achieve both academic success and the great inventions for which he is well known.

Recently, research by McKinsey (Denoël, et al., 2017) into PISA’s data has showed that students’ mindsets have more impact on their academic performance than their socio-economic background does. The mindset most predictive of success was a cluster of attributes associated with tenacity.



Indeed, for the last two decades there has been a growing interest in related concepts such as Carol Dweck's 'growth mindset' and Angela Duckworth's 'grit' with a mounting bank of evidence showing their value to students at school and in later life.

### **The concept of tenacity**

A combination of historical interest, empirical observation in schools and the kinds of research to which we have just been alluding led us to

create a new overarching concept of tenacity in *Developing Tenacity: Teaching learners to persevere in the face of difficulty*. Our idea is broad encompassing a range of dispositions promoting learning and achievement in and beyond school. Specifically, it incorporates resilience, persistence, perseverance, grit and self-regulation.

Resilience suggests mental toughness. Its Latin root *resilire*, means to 'jump back' or to 'recoil'. It describes the property of elastic material to absorb energy and to spring back to its original shape upon release. In human terms, it has typically referred to a person's mental ability to recover quickly from illness, disadvantage or misfortune. It is now commonly used as a subset of a larger concept – perseverance.

Persistence is being able to stick with a specific task in the face of difficulty, challenge, opposition or failure. It is a characteristic of successful learners in academic disciplines and in life. It implies a single-mindedness of effort when dealing with a specific activity. The combination of effort and persistence have been shown to increase achievement (Miller, et al., 1996) as well as being useful life skills in their own right.



Perseverance, although frequently used as a synonym for persistence, is stronger, implying continuing effort over time. Someone who perseveres may do so in the face of discouragement, opposition or past failure. The terms 'persistence' and 'resilience' can, arguably, be subsumed within this label. Students' perseverance can vary depending on the circumstance. One task may engender perseverance while another may demotivate.

Grit is a combination of both perseverance and passion for long-term goals (or 'consistency of interest' (Duckworth, et al., 2007)). It has generated much coverage in the media, to the point that even its 'creator' urges caution in an article that warns against the way 'the enthusiasm has rapidly outpaced the science' (Dahl, 2016). In fact, the idea of grit predates contemporary thinkers by some 200 years, being widely used in North American slang in the sense of having 'pluck' or 'firmness of mind', a bit like the Anglo-Saxon terms 'gumption' and 'nous'. Grit also connects to a related idea – 'deliberate practice'.

Lastly in our overview, tenacity requires habits of self-regulation, including self-control and self-discipline, the short-term controlling

of impulses. For our purposes, the element of 'discipline' demonstrates a series of positive actions (rather than the avoidance of certain actions implicit in the word self-control).

All of the elements of tenacity we have explored so far are, in effect, useful mindsets for learning at and beyond school. Mindsets are internalised beliefs about the nature of one's own academic ability or wider capabilities. If a student believes their own efforts will pay off, this high sense of self-efficacy is a strong indicator of success, (Dweck, et al., 2014). Mindsets contribute to tenacity by shaping students' goal orientation. Instead of being focused on pure performance, goals of students who perceive their own self-efficacy are learning-oriented.

### Tenacity in action

So what does tenacity look like in practice? It certainly includes aspects of academic tenacity. It is more than perseverance (grit minus passion). A person who is tenacious has a 'growth' mindset and believes in the efficacy of their own exertions; that being persistent pays off, both in terms of success and in terms of learning.

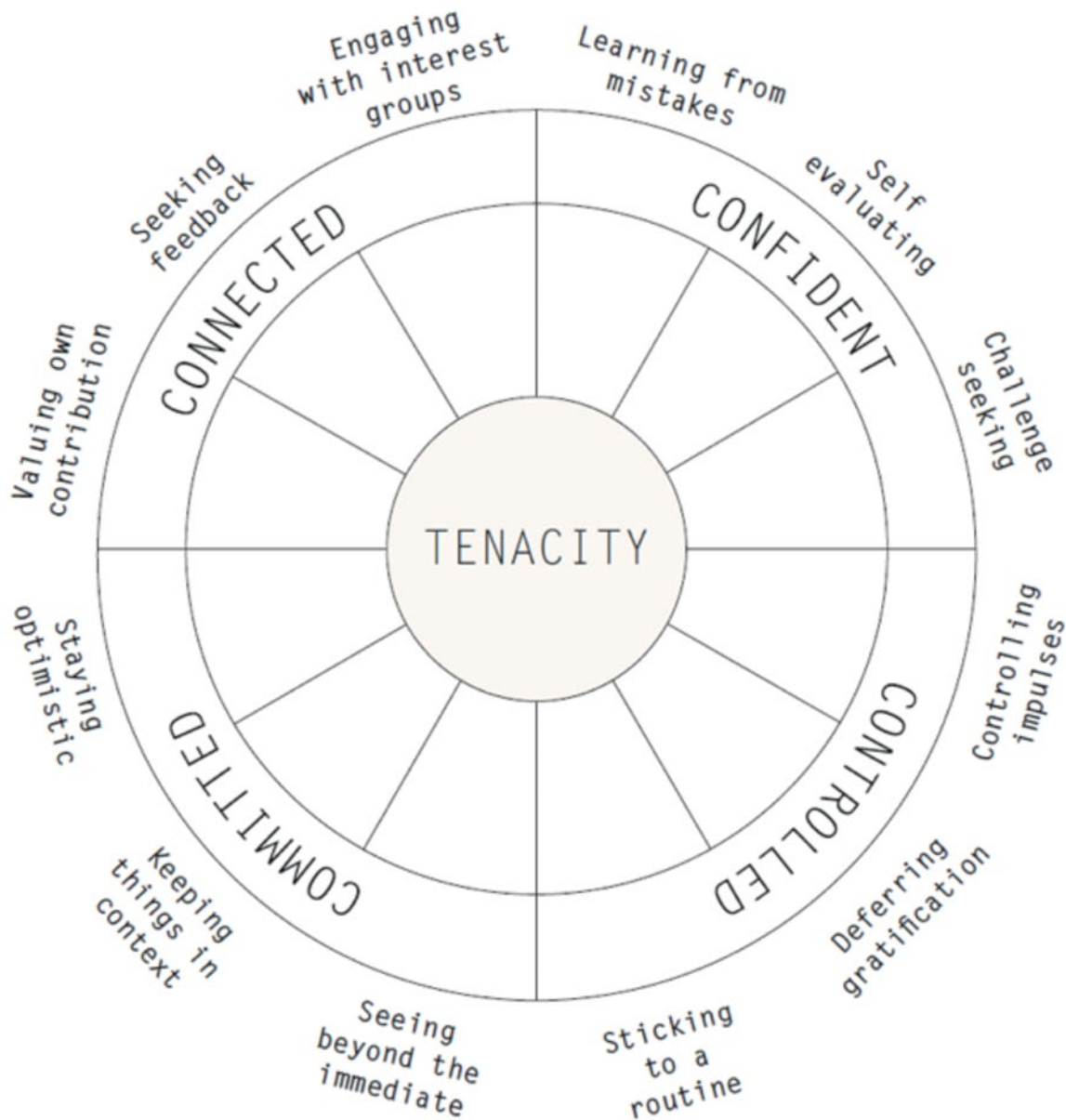
Tenacious students:

- View effort as a positive thing. They seek more stretching tasks that provide the challenge needed for learning to happen.
- Are able to defer gratification and ‘forego immediate pleasures for the sake of schoolwork’.
- View difficulties (‘intellectual or social’) as opportunities for learning or problems to be solved rather than as a ‘humiliation, a condemnation of their ability or worth, a symbol of future failures, or a confirmation that they do not belong’.

- Are able to remain engaged over the long term using self-regulation strategies that maximise motivation and minimise distraction. (Dweck, et al., 2014, p. 4).
- See education as being a route to achieving their personal future goals ‘such as providing for their families or contributing to their community or society’.

**Habits of tenacity**

In drawing together and thinking about what we know of tenacity, grit, self-control and related habits, we believe that there are essentially four habits of a tenacious thinker, which break down further into twelve sub-habits.



## Centre for Real-World Learning's Model of Tenacity

Our definition is applicable across the broadest possible range of subjects.

### Confident

Tenacious people are aware of their own self efficacy. This means they are learning-oriented rather than performance-oriented. They have a growth mindset or learn to develop one. Not hung up on trying to look clever, they actively seek opportunities to learn through challenge, mistakes and self-evaluation. Having weighed up their own performance, they will actively make a plan for change. In the moment, they will also draw on past experience to inform their own actions. They will step outside the bounds of what is comfortable to them in order to improve. Sub-habits of the confident learner are learning from mistakes, self evaluating and challenge-seeking

An example of being confident in a primary school might be a school policy that requires all classrooms to have a *Learning from our Mistakes* wall on which pupils are encouraged to annotate the lessons they have learned from their own and others' mistakes.

### Controlled

Tenacious individuals are able to self-regulate. They can use self-control when required, to avoid distractions. They can focus on tricky

tasks, seeing them through to completion. They work diligently, tolerating short-term boredom when practising the less interesting aspects of a skill. They develop routines for themselves that prepare their minds and their environment for different kinds of endeavours. Routines can be modified depending on the situation, but involve such practises as checking equipment, reading ahead and planning. Sub-habits of the controlled learner are controlling impulses, deferring gratification and sticking to a routine.

An example of being controlled in a secondary school could be a discussion activity in a PHSE session where students are invited to think of situations when they find it difficult to control their natural impulses (to shout, get angry, hit someone, etc.). Each example is written on a card and these cards are then shared with other students who come up with practical suggestions for better control or delay of strong feelings.

### Committed

Tenacious learners take a long view of things. They are able to persevere through difficulty because they can see the value of overcoming a problem to arrive at success. They have the wisdom to know when to quit. They don't persist with something 'just because' but make sure their rationale is sound. They are able to put both success and failure into perspective, refusing to dwell on what is past or to generalise single mistakes into evidence



of their own inadequacy. Sub-habits of the committed learner are seeing beyond the immediate, keeping things in context and staying optimistic.

An example of being committed in a primary school might be to identify characters from children's stories who display perseverance and create a display highlighting the kinds of things that they do.

### Connected

Connected learners understand the importance of engaging with other people and seek them out. While believing that their own actions and opinions have real worth, they recognise that these can be improved by interaction with skilled others. They seek out talented and committed peers in areas of their interest recognising the power of learning from and with others who are more advanced than them.

Sub-habits of the connected learner are valuing own contribution, seeking feedback and engaging with interest groups.

An example of being connected in a secondary school could be the establishment of expert advisory groups for all sixth form subjects with a termly meeting of parents and local community members where adult experts give short talks on topics of relevance to the curriculum – English and journalists, art and design and artists, etc.

### Why tenacity matters today

Developing tenacity is not just a nice-to-have – it's critical. Here are just four reasons why.

Tenacity leads to higher performance. A tenacious learner persists despite obstacles and failure. Of course tenacity in itself does not necessarily imply an 'overcoming' of problems. One has to know how to overcome the problem. A study by Arslan et al. (2013) found a useful connection between aspects of tenacity and an individual's metacognitive awareness – a person's knowledge and regulation of their own 'cognition'. It will mediate their regulation of effort, recognition of need for assistance, or deployment of learning strategies. Self-efficacy and associated concepts of challenge-seeking,

and the valuing of their own contributions have consistently been shown to be associated with school achievement.

Tenacity underpins social mobility. In 2012, the All Party Parliamentary Group on Social Mobility published a report after reviewing evidence about social mobility. It concluded that 'personal resilience and emotional wellbeing are the missing link in the chain'. In the USA similar arguments have been made by Richard Reeves and colleagues (2014) at the Brookings Institute.



Tenacity is valued across societies and cultures. James Heckman (a Nobel Prize winner in Economics) and Tim Kautz (2013, p. 6) list a range of character skills that are 'crucial to success in economic and social life'. A large number of these character skills relate to aspects of tenacity – perseverance, self-control, trust, attentiveness, self-esteem, self-efficacy, resilience to adversity, openness to experience, empathy, humility, tolerance of diverse opinions and the ability to engage productively in society.

Tenacity is part of what it is to be employable. Research by the Centre for Real-World Learning (Lucas & Hanson, 2016) into employability concluded that tenacity was one of a key set of employability habits including self-control, perseverance, resilience, curiosity and craftsmanship. The UK's employer organization the CBI has been explicit about the need for schools to develop determined, resilient, tenacious potential employees (CBI, 2012).

CBI, <i>First steps: A new approach for schools</i> Characteristics, values and habits that last a lifetime	
<i>The system should encourage people to be</i>	<i>This means helping to instil the following attributes</i>
Determined	Grit, resilience, tenacity
	Self-control
	Curiosity
Optimistic	Enthusiasm and zest
	Gratitude
	Confidence and ambition
	Creativity
Emotionally intelligent	Humility
	Respect and good manners
	Sensitivity to global concerns

Most importantly to all educators, tenacity is learnable. There are a set of strategies which, when embedded in the formal and extra-curriculum of schools, can help all learners become more tenacious.

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