Chapter 5: Student wellbeing

Overview

Learning is embedded in emotional states. A confident, responsible, reflective, innovative and engaged learner reasons and makes decisions on the basis of positive personal values and an understanding of their emotions. This chapter looks at the profound impacts of wellbeing and stress on learning and performance. Most of it has been written by the author and speaker Nicola Morgan, informed by presentations she gave in 2016 at Cambridge Schools Conferences.

Schools should care about wellbeing and stress because it is the decent and fair thing to do. However, they also need to care because wellbeing and stress management directly affect students' outcomes at school as well as their ability to thrive in later life. The concept of resilience is often used to describe people's ability to deal with pressure and stress effectively. It is a life skill that schools need to nurture. All students will encounter adversity and barriers to learning. The resilient will overcome these, helping them to fulfil their potential.

This chapter considers a number of potential pressures that can have an impact on young minds. Adolescent brains are different from those of mature adults in significant ways. The world in which young people operate is dominated by technology and social media, and this is creating new pressures that need to be understood. This chapter ends with some practical strategies for schools to improve stress management, increase wellbeing and empower students to manage their lives.

The adolescent brain

Adolescence can be described as a progressive transition from childhood into adulthood. During this phase teenagers go through profound changes in brain and functional development. These changes affect young people in different ways and to different extents, but it is important for teachers and other adults close to young people to recognise this.

For example, scientific evidence (Casey, Jones & Hare, 2008) suggests a neuro-biological reason for high-risk-taking and impulsive behaviour and emotional reactivity in adolescents. Emotional processing that occurs in subcortical limbic regions is particularly powerful in relation to control exerted by the prefrontal cortex area of the brain. This means that in situations that are personally emotionally charged, adolescents tend to rely less on intellectual reasoning and more on their feelings. If the situation is not emotionally charged, for example if an adolescent is asked a hypothetical moral question, logical reasoning will dominate.

The development of the social brain during adolescence supports the observation that during this period of life individuals may be more susceptible to social pressure to seek status with peers and also to embarrassment in social situations. Peer influence is an extremely important driver for behaviour at a time when adolescents are moving away from the protection of their family unit and building new groups (see Blakemore S.-J., 2014, for much work on the adolescent social brain). The importance of self-image in front of peers is particularly heightened during adolescence.

What is wellbeing?

Wellbeing describes a state of overall mental and physical health, strength, resilience and fitness to function well at work and personally. It was brought into the public and educational domain by positive psychologists, notably Seligman (2011), and offers an alternative to the goal of 'happiness', which tends to describe a transient, short-term state which cannot logically or practically be sustained for long. 'Happiness' itself – that active emotion, 'how I feel now' – is highly reactive, depending on the right things happening to or around the person. When a sad, worrying or difficult event or thought occurs, that feeling of happiness necessarily ceases or decreases. Happiness is hard to control, being immediately dependent on both an internal mindset and external factors.

'Wellbeing' is more stable and resilient. Although it is somewhat affected in the longer term by outside influences, when a sad, worrying or difficult thing happens, wellbeing is not immediately affected. In fact, a good state of wellbeing offers some protection against difficult outside events. One might say that wellbeing is a background state, whereas happiness is a temporary response to stimuli. Wellbeing helps cause success and good function; happiness is caused by them (among other things).

Wellbeing is neither permanent nor innate. It is a state of mind and body which is acquired over time and can be lost over time. It forms a valid part of a school curriculum because:

- it has profound direct effects on learning and performance

- it affects relationships with peers, family and teachers

- many aspects can be (to a valuable extent) within the control of an individual who has learnt good practices

- not being fixed, it is vulnerable over time to external events; therefore the individual needs to build a bank of wellbeing for resilience

- understanding about and strategies for wellbeing gained at an early age can be used at all stages of the individual's life – wellbeing management is a genuine life skill

- it explicitly affects learner attributes as students can better 'understand themselves as learners' when they understand some influences that directly affect their ability to learn easily

- for all these reasons, it falls into the competency category of Living in the World.

In summary, people with good wellbeing feel generally healthy, sufficiently positive, able to focus on the task in hand and ready to deal with whatever occurs. They have reserves of physical and mental health, and resilience, to help them deal with more negative events or challenges. Crucially, people with good wellbeing can proactively manage stress, rather than suffer from it. For more insights see Dodge, Daly, Huyton & Sanders (2012).

What is stress and what problems does it create?

Stress is a positive, life-enhancing and even life-saving biological response to threat or the need for peak performance. Its fundamental function is to respond instantly to physical threat or danger and optimise the powerful 'fight or flight' response in the brain.

When threat occurs, the brain (first the amygdala, followed by the hypothalamus and pituitary gland) instantly triggers the release of chemicals, most importantly the hormones adrenaline (in the US epinephrine) and cortisol. These combine to speed up the heart and breathing so that blood (carrying oxygen and glucose) is pumped quickly to the muscles of legs and arms, enabling them to be stronger than normal and to move faster. The nervous system is stimulated and the brain instantly becomes super-alert, focusing acutely on the threat, rapidly reacting to and choosing options to deal with it. The individual is likely not to notice less irrelevant things (including pain) and instead focuses on the task in hand: to survive and win, whether by fighting or fleeing. The physical feelings produced by these chemicals are somewhat unpleasant but this state of discomfort and agitation is required to stimulate the individual to act.

Thus, in a situation of threat, the stress response allows the individual to super-perform: to run faster, jump higher, fight harder, focus better and react more quickly and strongly, both mentally and physically, than under relaxed circumstances. 'Threat' is not confined to physical danger such as being chased by an aggressor or predator (the original biological purpose). It applies to all situations where a creature is required to super-perform or deal with challenge: exams and tests, competitions and matches, arguments and debates, any performance or situation where people are looking at the individual. Even apparently small things such as being asked a question one does not know the answer to, being addressed by a stranger, noticing that one is late for something, a person saying something hostile, something unusual or unpleasant or strange, hearing about a frightening or tragic event, having an anxious thought: all these activate the biological stress response. And the aim in every case is the same: to enable survival and success.

Therefore, stress is not something to avoid or fear. It is natural and healthy and facilitates best performance. In that case, why do we tend to frame it negatively? Why do some people 'suffer' from stress and become ill, under-performing instead of super-performing? Exactly what are the problems with stress?

Clearly, people do suffer from stress. Stress-related illnesses lead to time lost from school and adult work. Suffering from stress is very unpleasant and spoils our enjoyment of life. But we should be clear about the exact problems if we are to avoid meaningless clichés and if, crucially, we are to understand and act on some solutions.

There are three main ways in which stress can be a problem, whatever the age of the individual. We will later look at some ways in which teenagers may respond differently and reasons why some extra attention may be needed for that age group.

1. Panic: too much adrenaline response can lead to a feeling of panic or a full panic attack.

2. Cortisol build-up: cortisol doesn't disappear quickly once the threat is over and the build-up can lead to many short, medium and long-term problems.

3. Preoccupation: when our mind is occupied by something, we have less 'bandwidth' to focus on necessary tasks, so performance suffers.

Let us look in more detail at each problem. Later in this section, we will look at solutions.

The panic response and the effects of cortisol build-up

An over-production of or over-reaction to adrenaline makes the heart race to the extent that, instead of feeling focused and ready, we feel panicky, out of control. Most people will have experienced this. One feels overloaded by information and messages, while experiencing uncomfortable physical symptoms, such as shallow breathing, a racing heart or palpitations, sweatiness, nausea and even, sometimes, vomiting or diarrhoea. Usually, this passes quickly once the anticipated event (such as an exam, sporting match or public performance) is over. However, the individual may feel so uncomfortable that he or she focuses more on the discomfort than the performance.

Sometimes, this leads to a panic attack. A panic attack is different from a more ordinary feeling of panic in two ways: first, it is usually in response to something relatively minor rather than something commonly recognised as terrifying. This means that it can be unpredictable and sufferers may become anxious about the possibility of a panic attack. Fear of a panic attack can trigger a panic attack. Secondly, the severity is such that the sufferer loses control; the need to get away from the stressful situation can lead to running from the room, failing to notice what one is doing; sufferers commonly really believe (falsely) that they may die.

Whereas adrenaline dissipates quite quickly from the body once the threat or perceived threat has passed, cortisol lingers. Today's stresses tend to be frequent and lingering, rather than the occasional life-threatening ones that the stress response evolved for, so there is a huge opportunity for cortisol to build up.

Possible effects of cortisol build-up are wide ranging, and directly affect wellbeing, function and performance in all areas of life, including home, social and school. A function of cortisol that helps explain this is that it supresses some bodily functions that are 'unnecessary' in the moment of stress: including protective mechanisms such as the immune system. So we become temporarily vulnerable and this vulnerability can linger after the stress trigger has passed. It is often impossible to be clear which of the following are directly caused by cortisol build-up or simply a more general repeated assault on the stress system, but factors commonly associated with persistent stresses leading to cortisol build-up are:

- sleep problems – difficulty in getting to sleep; also waking in the night or early in the morning and not being able to return to sleep

- poor concentration (which is also damaged by poor sleep)

- weaker immune system – it is common to be prone to minor ailments when suffering stress build-up

- other physical health problems – many illnesses may be worsened or some even triggered by stress; people with unconnected health problems may take longer to recover when under stress

- repeated headaches and stomach-aches

- change in appetite and therefore weight gain or loss – people may either lose appetite or be drawn to more unhealthy foods, particularly sugar and other carbohydrates

- low mood – which can lead to problems in relationships and lower self-esteem

- irritability – also affects relationships and self-esteem.

Preoccupation

This interesting and complex topic is relevant not only to the effects of stress on learning and performance but also to the widespread problem of distraction and multi-tasking in today's technology-dominant society. This will be mentioned in more detail later in the chapter but here let's look at preoccupation in relation to stress.

It is helpful to think of the brain as working on a 'bandwidth' principle (see Mullainathan and Shafir 2014), using the analogy of broadband bandwidth. The capacity of connection to the internet (whether fixed or wireless) is finite. If someone using the same line is doing something that occupies much bandwidth, everything else is slower. The brain works analogously. We have a finite amount of bandwidth or processing power, and different activities (both mental and physical) occupy different amounts. Some occupy little – those we have become expert in and which require little concentration, such as walking, clapping hands, routine tasks such as brushing our teeth. Other activities occupy a lot – complex or unfamiliar ones, or any we sense require a lot of concentration, such as reading complex or new material, writing, solving a problem, listening to instructions (see Levitin, 2014 for a comprehensive overview).

One activity which illustrates this is car driving. Once we are experienced drivers, we can do some driving without thinking very much; we can hold a conversation; listen to music or voices on the radio; think about our next meeting. We are driving somewhat automatically and using relatively little bandwidth compared to when learning to drive. But when a situation arises where we have to concentrate more, these secondary tasks become more difficult. If we have to concentrate on an unfamiliar route, or park in a tricky space, or a traffic situation arises, we tend to stop talking and may turn the radio off because we sense that we need more bandwidth for the driving activity. In fact, car manufacturers often engineer the car so that radio volume reduces during parking.

This will become very relevant when we look at distraction in the context of wellbeing, but it is relevant to our discussion of stress because one thing that occupies bandwidth is any major stressful situation or anxiety. When we are worried about something, that worry occupies a significant amount of bandwidth and affects concentration and performance. It is vital that we understand that bandwidth is effectively finite. Even if it turns out that we can learn to stretch it somewhat, in practical terms we are limited by the bandwidth we have at any time. This means that if a significant part of our bandwidth is occupied by something else, we cannot focus and perform at our best on the task in hand. Performance on that task suffers. This is why genuine multi-tasking is so difficult. People of all ages are vulnerable to this but there are reasons which make teenagers more likely to be vulnerable.

How do the challenges of stress affect teenagers more than others?

Biologically, stress seems to work similarly whatever one's age. There may, however, be small differences in sensitivity and adaptation in adolescence compared with adults. Some research suggests (Romeo, 2013), that hormonal stress responses may be stronger in teenagers, who may also adapt to a stressful stimulus more slowly, requiring more exposure to a particular stressor before learning to manage it with a less negative response. However, these differences are not categorical and may be small. Regardless, there are several ways in which teenagers may have more difficulty with each of the three stress problems.

Panic response:
- Teenagers have less previous experience of each stressor, so may be less able to process an event as 'something I have met before and will be able to manage'.
- They are less likely to have learnt simple strategies with which to fight the response.

Cortisol build-up:
- A school day contains many possible stressors. Students go between lessons, switching topic rapidly, and are required to perform better both in subjects they succeed in and subjects they struggle with. They are asked questions they cannot answer or criticised for imperfect work. Break times are not usually a genuine 'break', as students must socialise in a noisy environment and may be dealing with negative situations with friends and peers. (This is particularly the case for introverts, who require more breaks from noise.) There are pressures about how they look, how they speak, how many friends they have.
- There is little opportunity to relax, and adolescent free time often involves social media and screen time.

Preoccupation:
- Three mental activities use a significant amount of brain bandwidth: intrusive worrying or anxiety; processing new information; and using digital media. These are not the only high-bandwidth activities but teenagers may be trying to do all three simultaneously. When we discuss digital media and multi-tasking, this will become even more relevant.

- When preoccupied by a worry, it is very difficult to focus on work. The brain area we would use to force focus is the prefrontal cortex, which is not fully developed until well into the 20s (Morgan, 2007) so most teenagers will struggle more than adults with this.

- Teenagers typically have a great deal going on in their lives, each one occupying mental capacity.

What extra stressors do teenagers have?

There are stressors that apply more to this age group than to others. Consider how each might contribute to one of the three negative stress categories, occupy brain bandwidth and lower wellbeing.

- A perfect storm of change – everything is changing: their brains, bodies, chemistry, friends, pressures, curriculum, fears, protection from adults. Change is stressful if it is change one has not asked for or cannot control.

- Lack of control – they can control very little about their day. They may have developed 'learned helplessness', becoming so used to lacking control that they fail to notice where they could have control. They may not ask for help because they think no help is possible.

- Exams – stakes are high, with frequent demands to achieve the best, often unattainable goals.

- The internet and social media – these provide enormous benefits but come at some cost. Many costs apply equally to adults engaging in digital media, but teenagers may be more vulnerable because of extra pressures to do what friends and peers are doing and less well-developed neural control centres. Very briefly, these costs include:

  - Strong temptation to spend too much time on devices – this temptation is biological and powerful, involving dopaminergic reward pathways in the brain (Kardaris, 2017), which are activated during pleasurable experiences and addictive behaviours towards activities or substances we find pleasurable. Addictive behaviour is defined as continuing to seek pleasure despite clear negatives occurring from that pleasure.

  - More 'friends' than we can manage – the evolutionary biologist Dunbar (1997) has studied social groups of different species in relation to brain size and posits that humans can manage up to 150 'friends'. Friendships need to be maintained by certain actions and contact, and with more than around 150 we cannot do this properly. Anyone on social media typically has far more than 150 friends and contacts, and the act of trying to maintain them all – by responding with 'likes' or sympathy, for example – is stressful, exhausting and time consuming.

  - Constant comparison and goals of perfection – everyone's lives seem to be perfect, as they display their beautiful (touched-up) photos and talk about only their successes.

  - Competition for popularity – measured by how many 'likes' one's social media post has received. Each time we see that someone has liked a post or photo, we get a small rush of dopamine, that chemical responsible for the feeling of pleasure. There's evidence (Freitas, 2017) that many young people (and perhaps others, too) measure their own worth by how many likes a post or picture has received and can spend huge amounts of time checking.

  - The 'online disinhibition effect' – the theory proposed by Suler (2004) showing that most people of all ages are somewhat less careful or inhibited online than face to face. The 'toxic disinhibition' that he describes helps explain the prevalence of cyber-bullying and online 'trolling', as well as careless behaviour such as sending risky messages or pictures.

  - Some young people are dealing with difficult situations at home. They may be witnessing parental strife or unhappiness, dealing with illness or even the death of someone close to them, caring for a family member or aware of a whole range of preoccupying life problems. It is harder for adults to protect them from these things and yet they are not yet fully equipped to cope.

  - Friendships and peer pressure can be huge problems for this age group, harming wellbeing and dominating mental space.

  - Information overload, 'continuous partial attention' (Stone, 2017) and the problems of multi-tasking. These arguably affect any adults, too, and form such a large topic that we will look at them separately.

Digital media: information overload, continuous partial attention and multi-tasking

Those who use the internet and social media are reading far more than we were 20 years ago. Our screens, especially when we are online, provide many requests for attention, whether from notifications from apps or platforms, hyperlinks which we must decide whether to follow, moving images to attract attention, and text that encourages us to skim rather than to focus deeply. Many of us are in a state of what Stone (2017) calls 'continuous partial attention' – a phrase she coined in 1998, before smartphones had come to dominate. This state is likely to create a level of stress and inefficiency and, therefore, to lower performance on tasks that require focus.

We are all familiar with the experience of trying to concentrate and someone interrupting with a question or demand for attention. Most would agree that ability to concentrate is harmed, that we would perform better if left uninterrupted. When we (and this applies to all ages) work on digital media we have a situation where those interruptions and distractions are almost inevitable. Very often, communication software will be open while we are working, so notifications of emails or other messages may arrive. We can choose not to open those messages, of course, but that requires great self-control, which in turn requires significant mental energy and bandwidth. Even if we switch off our email and social media and remove our phones from sight, focusing on the document on our screen, we are distracted by hyperlinks. Each one requires a decision: to click or not. If we click, we are taken somewhere else and must adjust to the new document while somehow trying to remember the one we were reading. If we choose not to click, we expend energy in that decision, and research suggests that it takes more mental capacity to resist the temptation than to follow the link.

The message from a number of sources (Levitin, 2014; Gazzaley & Rosen, 2016) is clear: multi-tasking (with activities that require conscious mental process) is generally bad for performance and the attempt to multi-task by allowing interruptions is stressful.

Extra stress for introverts

Introverts are often particularly poorly catered for and undervalued in today's noisy, busy, social, collaborative schools and many workplaces. Yet they are estimated to make up a third to a half of all people (Bayne, 1995). To understand this, we must first understand introversion (see Cain's work (2013) for an excellent analysis). We must note that introversion is neither 'better' nor 'worse' than extroversion; they are simply two different sets of personality traits and there are advantages and disadvantages to each.

Despite popular opinion, shyness has little to do with introversion. Introversion describes an over-reaction to external stimuli, especially stimuli that include human interaction. Introverts may deal very well with strangers, have lots of friends and be adept performers. But every social situation, from a relaxed face-to-face chat with a close friend to walking into a room full of strangers or performing in front of a crowd, is mentally and physically tiring for an introverted person. An extroverted person, on the other hand, will typically feel energised by social interaction. This is partly a biological response but partly also because as an introvert it can feel as if one is using more 'brain bandwidth' when interacting with other people. Introverts may spend more effort imagining what the other people might be thinking, what other people's needs are, how the social situation is working. An extrovert might be having fun, while the introvert is processing a number of potentially alerting and stressful thoughts. They can do it but it has a cost: mental exhaustion and a feeling of being overwhelmed.

At school, many teaching methods and activities involve collaborative work. While collaboration cannot be ignored, teachers should realise that during these activities introverted students are unlikely to be doing their best work and may be more exhausted and more stressed, leading to poorer learning outcomes. When an introvert is asked to do a piece of work jointly with a neighbour, the introvert switches out of learning mode and into social mode. The last thing on his or her mind is 'How can I do as well as possible on this piece of work?'

Of course, most people have a combination of introvert and extrovert tendencies, or may feel differently in different situations or when in different mental states. But a significant number (even if a minority) of the students in any classroom will score highly on tests for introversion, and they pose specific problems and have specific needs if they are to fulfil potential at school and have good wellbeing.

The special requirements of introverts – and how to provide them:

- A school day, being noisy, busy and high pressure, and involving almost constant social interaction and expectation, is likely to be exhausting for introverted students. They need options for time out, to replenish their energy levels and reduce cortisol.

  - Ensure that your school has a place where students know they can find peace during break times. Offer time and explicit permission. When talking about this avoid terminology that suggests that students who need this are in any way more fragile than others. (This is not the same as a safe space. It is simply acknowledging that noise and social intensity are not good for some people.)

- Many students and staff have a poor understanding of introversion and may fall into the common trap of valuing introverts less highly than the social, seemingly confident extroverts. This can lead to low self-esteem for introverts and teasing by others.

  - Share understanding among students and staff of what introversion is. Of course, some staff will have introvert tendencies and this can be used to help understanding. Ensure that equal value is placed on introversion and extroversion, and that students can value the strengths that each other brings to all situations.

- Students need to learn skills to succeed in the extrovert world, including being able to stand up in front of peers and express oneself. Avoiding the things we fear is not the best way to overcome them.

  - While acknowledging that public performance may make introverted individuals more anxious and uncomfortable, teach that these skills can be learnt and that practice and familiarity make them easier. Expose students to challenging situations step by step, gently and respectfully. Encourage them to be proud of their achievements and to see the challenges as achievable and worth aiming for.

- Collaborative work is likely not to suit introverted students, but collaboration is necessary in schools and in life.

  - There are ways for teachers to manage collaborative situations to the value of all students. Cain's 2013 work (op cit) offers examples. Teachers should consider: assigning suitable team roles; allowing students to choose partners; offering choices for reporting and work sharing; sensitively facilitating turn sharing; joint presentations.

- Answering a question in public or sharing one's work with the class is likely to be very stressful for introverted students, yet this is a necessary part of schoolwork.

  - If students are aware both of the need for contribution and why it can be difficult, they can be armed with useful and often simple strategies. For example, they can prepare questions in advance, offer their contribution early in the lesson to get it over with and acknowledge pride in their achievement when they rise to the challenge.

  - Teachers can be encouraged to create an environment in which all students feel able to contribute without fear that they will be teased if they get it wrong or right. One useful idea is to tell students that no one should put their hand up for a certain amount of time after the question is asked; this gives introverts time to test their answer internally and extroverts time to think more carefully.

Strategies for schools

We see that stress can be a huge factor in teenage lives and can negatively affect their wellbeing and performance, despite its biological function being to encourage peak performance. What can and should schools do about this? How can you help students to manage stress so that it becomes genuinely performance enhancing, something that they can thrive on, not just survive with?

It is impossible to provide a complete guide to stress management in this space but the resources at the end of the chapter will guide you further. It is important also to share these with parents, so that they can reinforce the messages at home.

1. Educate about the biology of stress: what stress is; how it affects us (each somewhat differently); recognising symptoms; simple strategies to deal with each of the three categories of negative stress.

2. Ensure that no students or staff think stress is a weakness. Encourage openness and respect.

3. Reinforce the message that relaxation is not a luxury but essential for wellbeing and improves performance. Managing stress is as important a part of health and wellbeing as eating the right (and right amount of) food, having physical exercise and good quality sleep.

4. Teach instant calming strategies such as belly-breathing. This is sometimes called diaphragmatic breathing or abdominal breathing and refers to the fact that when we are stressed our breathing tends to become shallow and move to the upper chest. If we can learn to shift our breathing towards the abdomen, we immediately notice less tension and we feel better. Although it is simple, students should practise this so that it is easy to activate at moments of extreme stress or in a panic attack.

5. Provide 'time-out' every day and encourage students to build this into their own day/evening. For some, this will be a place where there is peace and quiet; for others it will be somewhere they can let off steam with physical activity.

6. Be deliberate about this time-out: when we expect a result, we are more likely to notice and experience it; so, if we take a break, do some exercise, read a book deliberately as a stress management activity, we are likely to experience greater benefit than if we were not so conscious and deliberate.

7. Provide good sleep education (see Wiseman, 2015). Understand the importance of sleep and how it is not only essential for mental and physical health and wellbeing but also for learning. Direct students to good advice about 'sleep hygiene', the term used to describe the things we should and should not do in the hour or so before sleep.

8. Emphasise the importance of a quiet, technology-free hour before bedtime.

9. Encourage daily exercise for pleasure: something each student can enjoy, whether team sport or solo exercise, energetic or not.

10. Encourage reading for pleasure. Understand and share the strong evidence (see The Reading Agency, 2015) of many benefits, including stress reduction and sleep improvement.

11. Give clear routes for students to talk to someone they trust. Keep these routes open and repeat regularly. Ensure that some staff have counselling skills and, ideally, mental health first aid training. Crucially, ensure that students understand that there is help for them.

12. Understand introversion and share that understanding among adults and students. Make sure you cater for and value introverts and extroverts equally.

13. Educate about the downsides of attempting to multi-task: worse performance and concentration, greater stress and exhaustion. Teach (and model) the importance of switching off devices when trying to concentrate. If devices are being used for a particular task, ensure that background or social media apps etc. are switched off and that only necessary software is open.

14. Model good stress management yourselves: students need to see a) that adults also have stress and b) that we deal with it proactively. Digital switch-off and making time for focused activities such as reading for pleasure are important for all ages.

15. Reinforce a message of 'active agency': the mindset that tells us that we can control a lot of our wellbeing by taking care of our diet, sleep, physical exercise and stress.

Learning to see failure as an opportunity

One consequence of moving from a performance to a learning orientation is that failure is viewed as both inevitable and desirable because it is impossible to grow as a human being without learning from failure. Humans are born with an instinct to learn from mistakes in a way that does not generate anxiety or stress. This changes if expectations are forced on young people to be successful, with performance and position counting for more than learning.

One of the purposes of the learner attributes is to encourage learners to be risk takers who have the confidence to take on new challenges and enjoy learning from mistakes. This requires learners to not be frightened to ask for support and help, and not to worry about losing face to their peers or teachers. Having intrinsic self-motivation is necessary for young people to become flexible, independent learners who are not dependent on extrinsic rewards. The resilient will have coping mechanisms to deal with failure, supported by the behaviour of individual teachers and the culture of the school.

Supportive parenting

It is very important to teach parents about the learner attributes. This helps them to understand the importance of having a learning rather than a performance orientation. This guide argues that doing this effectively will prepare young people for higher education, the workplace and life, as well as improving examination performance. For a helpful resource see the Queensland Research Digest (2014) listed in the Resources section.

According to Lahey (2013) schools need to have active strategies against over-protective parenting. He says: 'Year after year, my "best" students – the ones who are happiest and successful in their lives – are the students who were allowed to fail, held responsible for missteps, and challenged to be the best people they could be in the face of their mistakes.'

Lahey suggests teachers help by:

- creating a classroom culture where failure, setbacks and disappointment are expected and form the basis of future learning

- establishing and reinforcing an atmosphere where students are praised for demonstrating good learning habits, perseverance and grit rather than grades

- holding students to account for producing their own work. If work is not completed or it is plagiarised, there is a direct consequence

- educating parents that supporting their children through failure builds resilience and will prepare them well for success in the future.

Mindfulness

Mindfulness is increasingly becoming recognised as an effective approach that supports social and emotional learning and the development of resilience and emotional intelligence. Kabat-Zinn (1994) describes mindfulness as 'paying attention, in a particular way, on purpose, in the present moment, and non-judgmentally'.

Mindfulness practices are aimed at helping people to accept and respond skilfully to events as they happen. Adolescents who are mindful, either through temperament or training, tend to experience greater wellbeing, and mindfulness correlates positively with positive emotion, popularity and friendship extensiveness, and negatively with negative emotion and anxiety (Miners, 2008, cited in Weare, 2013).

While scientific evidence is currently limited, a number of well-conducted studies have produced promising results (see Weare, 2013). One significant project currently in progress is the MYRIAD (2015) mindfulness and resilience in adolescence study.

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Other useful resources

Nicola Morgan. Extensive, excellent resources including many free downloadable materials. There are also perpetual licences for classroom resources suitable for schools worldwide, such as Stress Well for Schools, Brain Sticks and Exam Attack.
www.nicolamorgan.com

See also her presentation slides at the Cambridge Schools Conference, Kuala Lumpur, 2016:
www.cambridgeinternational.org/images/346721-teaching-brains-in-your-classroom.pdf

Positive Psychology Center, University of Pennsylvania (M. Seligman)
http://ppc.sas.upenn.edu/learn-more/readings-and-videos

YoungMinds is the UK's leading charity committed to improving the emotional wellbeing and mental health of children and young people. There are resources and publications available on the website, including on building resilience.
www.youngminds.org.uk

Parents and teachers working together to foster children's learning
A research digest from the Queensland College of Teachers, Australia. Provides interesting insights that are widely applicable. (Number 10, November 2014).
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