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The ideal learning culture

6 *Motivation is the most important factor in determining whether you succeed in the long run. What I mean by motivation is not only the desire to achieve, but also the love of learning, the love of challenge and the ability to thrive on obstacles. These are the greatest gifts we can give our students. 9*

(Dweck, 2006)

Over the years during which our understanding and practice of formative assessment have so far evolved, it has been clear that strategies and techniques have very little impact if the *culture of the classroom* does not support the philosophy or ethos of the key principles. We can list the component parts or key messages of formative assessment, but the appropriate learning culture consists of less tangible elements. The elements which most often arise in discussion in my learning teams and in other continuing research are dealt with in this chapter. What seems to matter the most are:

- How teachers and pupils view ability and consequently their learning potential;
- What teachers and pupils think the ideal learning environment should consist of, and effective strategies to create and sustain that learning culture.

How teachers and pupils view ability and their learning potential

Much research carried out by Carol Dweck and others (e.g. Dweck, 1975, Weiner, 1984; Weiner, Heckhausen and Meyer, 1972) shows that pupils differ in whether they regard their successes and failures as the

result of certain factors. Boys are more likely to attribute their successes to ability and their failures to lack of effort and bad luck. Girls, on the other hand, are more likely to attribute their successes to effort and their failures to lack of ability. Girls, especially, if they feel unsuccessful, are liable to suffer from low confidence which, if it continues, results in what Dweck (1975) calls 'learned helplessness'.

Dweck built on this work and has now established – through thirty years of studies involving thousands of children and adults from all walks of life – that what matters the most, in terms of motivation, is whether we see ability as *fixed* (an entity learner) or *growth* (an incremental learner). In short, people with a 'fixed' mindset will only tackle tasks which they know, in advance, they will succeed at. People with a 'growth' mindset not only willingly tackle difficult tasks, but thrive on them. Examples of both mindsets, in terms of their characteristics and the repercussions, are given below. Our aim, of course, must be to develop a *growth* mindset – for ourselves, for all adults involved in working with children, for parents and all our pupils.

The 'fixed' mindset

Characteristics of a 'fixed' mindset	Repercussions
My intelligence is a fixed trait – I have a certain amount of it and that's that.	I worry about how much intelligence I have and it makes me interested in looking and feeling as if I have enough. I must look clever and, at all costs, not look stupid.
I feel clever when things are easy, where I put in little effort and I outperform my peers.	Effort, difficulty, setbacks or higher performing peers call my intelligence into question, even if I have high confidence in my intelligence, so I feel stupid.
I need easy successes to feel clever.	Challenges are a threat to my self-esteem, so I won't engage with them.
I don't want to have my inadequacies and errors revealed.	I will withdraw from valuable learning opportunities if I think this might happen.
Even if I'm doing well initially, I won't be able to cope with a problem or obstacle.	I readily disengage from tasks when obstacles occur.

The 'growth' mindset

Characteristics of a 'growth' mindset	Repercussions
Intelligence is something I can increase through my own efforts.	I am keen to work hard and learn as much as I can.
I acknowledge that there are differences between people in how much they know and how quickly they master things.	I believe that everyone, with effort and guidance, can increase their intellectual abilities.
I love to learn something new.	I will readily sacrifice opportunities to look clever in favour of opportunities to learn something new.
I am excited by challenge.	Even if I have low confidence in my intelligence, I throw myself into difficult tasks – and stick with them. I set myself goals and make sure I have strategies to reach them.
I feel clever when . . .	I am fully engaged with a new task, exerting effort to master something, stretching my skills and putting my knowledge to good use (e.g. helping other pupils learn).

People with a fixed mindset need to constantly prove their ability, proving that they are special or even superior, whereas people with a growth mindset believe that intelligence can be developed through learning – something which brain research has proved to be true. In one study (Dweck, 2006), people were asked hard questions and given feedback about their answers. Their brain waves were monitored to see where they were interested and attentive. People with a fixed mindset were only interested when the feedback reflected their ability, when they were told whether they were right or wrong. When they were presented with information which could help them learn, they showed no sign of interest, even when given the right answer for something they had got wrong. Only people with a growth mindset paid close attention to information that could stretch their knowledge. For them, learning was a priority. Even for people with a growth mindset, failure can still be painful, but the big difference between them and people with a fixed mindset is that they don't believe that failure *defines* you. It is rather a problem to be faced, dealt with and learnt from.

Self-esteem

Before I outline strategies for encouraging a growth mindset in ourselves and our pupils, we need to be clear about our understanding of self-esteem. All parents, hopefully, want their children to have a basic sense of self-worth – to know that they have our respect and love, but after that self-esteem is something *they* are in charge of and we can only facilitate. High self-esteem happens for those with a growth mindset when they are using their abilities to the fullest in something they value, rather than showing that they are better than someone else.

Strategies for developing a growth mindset – for teachers, parents and all involved in education

Modelling a growth mindset

We need to model our own growth mindset and love of learning by emphasising processes of learning, the importance and excitement of meeting challenges, putting in effort and using strategies which help us learn. We need to teach children that intelligence can be developed. We need to transform ‘difficulty’ into ‘new or deeper learning’ and avoid expressing sympathy when children encounter failure or difficulty. We need to show enthusiasm about challenging tasks and ensure that failure is followed up by celebration of what has been learnt by the experience, in terms of new strategies needed. By doing this, we help ensure that challenge and effort are things that *enhance* self-esteem rather than threaten it.

Teachers with a fixed mindset often give lower achievers less demanding work in order to preserve their self-esteem – making sure they succeed, telling them how clever they are . . . and dooming them to fall further behind. This approach also ensures that these pupils will only feel successful when they can do things easily.

With a growth mindset, you tell pupils the truth. If they don’t have skills or knowledge, or if they are underachieving, this is not a sign of something shameful, but a sign that they need to work harder or be helped to find new strategies. By giving pupils greater access to tasks (i.e. increasing the level of support within the task itself), for instance, they instantly have greater access to the success criteria used in formative assessment.

Praising effort and achievement rather than ability or personal attributes

Praising pupils' intelligence harms their motivation and their performance. Children love to be praised for their intelligence and talent, but if this is the norm, the minute they encounter an obstacle their confidence drops. If success means they are clever, then failure can only mean they are not! This hooks them neatly into a fixed mindset. Dweck (2006) gives some examples of well-meaning comments and what pupils actually hear:

'You learned that so quickly! You're so clever!
If I don't learn something quickly I'm not clever.

'Look at that drawing! Is he the next Picasso or what?
I shouldn't try drawing anything hard or they'll see I'm not.

'You're so brilliant! You got an A without even studying!
I'd better stop studying or they won't think I'm brilliant.'

Any feedback we give pupils clearly needs to support a view of ability as incremental rather than fixed. We need to praise pupils for **what they have accomplished and the strategies used**, such as practice, research, persistence, evaluating and making improvements: '*Well done, that is a beautiful rainbow, especially the way you've worked so carefully at blending the colours*', '*Fantastic. You worked so hard at that problem.*'

With my own three-year-old daughter, I have been able to see at first hand the impact of the language used to encourage and praise. Before I read *Mindset*, by Dweck, I was more likely to absent-mindedly tell her how clever she was at all her infant achievements, like crawling and walking. Luckily, those things are now mastered and are no longer part of a learning journey. When she first completed an easy jigsaw, however, I again told her how clever she was – and saw the exact repercussions described by Dweck. The moment she now encounters any form of difficulty with a jigsaw, she expresses displeasure and says '*You do it!*' She refuses to have a go if I tell her to try again. We now only use the word *clever* to describe something inanimate, rather than to describe her ability ('*The way that hot air balloon works is so clever*') and again, she copies our use of the word ('*That's clever! The cooker rings a bell!*'). I have found it particularly effective to focus my praise on learning, telling her how good it is that she is *learning to* . . . write, read, use paints, cut out, use a potty, etc. She copies this language about things she still has to work at, with pride and enthusiasm ('*Look Daddy! I am learning to wind the tape measure*'). The words we use clearly form attitudes and beliefs.

So what *do* you say when someone completes something quickly and perfectly? At home, you would just acknowledge that it had been achieved, with no mention of any related intelligence. Dweck states that speed and perfection are the enemy of difficult learning, so, in the classroom, we would respond by apologising for wasting their time in giving them something which was not challenging enough. Children need further learning experiences, rather than to do things they find easy.

A set of commonly devised strategies for dealing with challenge can be a useful visual prompt for enabling pupils to be self-sufficient, such as:

When something really makes you think . . .

1. Don't worry or panic.
2. Remind yourself that, if it makes you think, you are learning.
3. Read the success criteria again and check exactly where you are having difficulties.
4. Look at any finished examples to see what other pupils have done.
5. Ask your talk partner for advice.
6. Use class resources to help solve the problem, such as a thesaurus or number line.

Avoiding external rewards

The fixed mindset is perpetuated by the use of external rewards, mistakenly given to pupils to boost their self-esteem, when the opposite actually results. A considerable number of studies (e.g. Dweck, 1989; Elliot and Dweck, 1988) show that *performance goals* – such as house points, gold stars, class ranking or comparison with others, smiley faces, wanting to win positive judgements about your performance, and so on – lead to pupils who:

- avoid challenge when they have doubts about their ability compared with others;
- tend to create an excuse for failure;
- tend to see ability as fixed;
- concentrate much of their task analysis on gauging the difficulty of the task and calculating their chances of gaining favourable ability judgements;
- attribute difficulty to low ability;
- give up in the face of difficulty;
- become upset when faced with difficulty or failure.

Lepper and Hodell (1989) found that external rewards have a detrimental effect on intrinsic motivation. Extrinsic rewards can be seen as a 'bribe' which skew motivation. They adversely affect performance, encouraging pupils to complete tasks as quickly as possible, and include only those features which are needed in order to gain the reward. Children who are used to rewards tend in future not to choose activities where there are no rewards to be had, and also prefer less demanding tasks. Intrinsic motivation, or a growth mindset, promotes more effective, deeper and longer-lasting learning.

Gerry Miller, the coordinator of the North Tyneside Learning Team for 2007, was particularly interested in the implications of fixed and growth mindsets and had introduced teachers to Carol Dweck's work before the team first met. As a result of the extra experimentation in schools which stemmed from this focus, I asked both Gerry and one of the teachers involved in working with her class on developing a growth mindset to write about their findings for this book. Gerry Miller's interesting account is given first, followed by Angi Gibson's, a Deputy Head and Year 6 teacher (11 year olds).

The importance of a growth mindset in raising achievement and aspirations

Gerry Miller, North Tyneside EAZ director

When I came across Carol Dweck's research in her book *Self-Theories: Their Role in Motivation, Personality & Development* (2000), I realised that we need to overtly promote the growth mindset if we are to develop truly resilient, self-sufficient learners.

If I had known of Carol Dweck's work when I was teaching in secondary schools, I would have said to the bottom set I used to teach something like this:

'This is set 3 out of three. You are in this group mainly because of some poor literacy skills. We are going to work extra hard to improve your literacy skills at the same time as we learn about history, and have some fun along the way. We are going to do the same work as the higher sets, and our aim is to do better than many of those in set 2. If you achieve that, you will have the chance to move up. The best way for us to be successful is to work together and support each other so that everyone will be successful.'

It was interesting to note that, when asked what these students found useful in lessons, they often said things like: 'Learning how to spell key words as I'm not a good speller' or 'Learning where to put the apostrophe'. This was useful feedback to me, as it told me that they valued help with literacy skills and recognised this was where they needed to improve the most.