

## Building Resilience: 3 station workshop

### Station A: making mistakes and getting things wrong

#### Instructions

**This task has 3 steps.**

**Step one.** Take each of the statements below in turn. Everyone in the group say whether they agree or disagree with the statement or are undecided. (3 minutes)

**Step two.** Read through the information sheet (2 minutes)

**Step three.** Now return to statements 2, 4 and 6 and discuss if/how your opinion has changed. Then look at statements 1, 3, 5 and 7 and discuss if you would like to change your behaviour/thinking in these areas and how this might affect your academic experience and performance. (10 minutes)

#### Statements

1. I try to avoid mistakes at all costs
- 2. Good students don't make mistakes or get things wrong**
3. Making mistakes shows me that I'm not a top student
- 4. Failure is negative**
5. I feel uncomfortable when I get something wrong
- 6. People who excel in a particular area e.g. maths are good at it because it comes naturally to them**
7. I give up easily when I find something difficult

## Station A: making mistakes and getting things wrong information sheet

The following four examples describe how mistakes play a vital role in learning and can pave the path to success

**1. Jo Boaler** is Professor of Mathematics Education at the University of Stanford. Her research investigates how students' attitudes and beliefs affect their 'ability' in Mathematics. Boaler stresses the importance of seeing 'mistakes' in a radically different light:

"Research has shown that mistakes are important **opportunities for learning and growth**, but students routinely regard mistakes as indicators of their own low ability". (Boaler, 2013 p. 149)

Boaler goes on to explain that:

"When students **think about why something is wrong**, new synaptic connections are sparked that cause the brain to grow. . . [this] suggests that **[we] should value mistakes** and move from viewing them as learning failures" (Boaler, 2013 p. 149)

Therefore, Boaler argues that, if handled properly, mistakes have the potential to be turned into learning achievements

Boaler, J. (2013) 'Ability and Mathematics: the mindset revolution that is reshaping education', *Forum*, 55 (1).

**2. James Zull** is Professor of Biology, Biochemistry and Cognitive Science at Case Western Reserve University. He is the author of two books that illustrate how neuroscientific insights can be applied to help us learn more effectively. Like Boaler, he argues for the virtue of mistakes:

". . . in formal education, we may think that fear and mistakes are bad and should be avoided, but I am suggesting that a **'mistake rich' environment is preferable**. It produces a better education and leads to more insight and more truth. Mistakes are expected and become information. **It is a cause for worry if a student does not make any mistakes"**. (Zull, 2012, p. 73)

Zull, J. (2012) *From Brain to Mind: using neuroscience to guide change in education* Sterling, Va Stylus Pub.

**3. Tom Burns and Sandra Sinfield** are the authors of multiple books on learning development and study skills for both students and staff. They urge us to remember that as humans, it is through trial and error that we learn:

". . . students have to realise that they will get things wrong – quite often – but if they work to learn from these experiences they will learn more". (Burns and Sinfield, 2004, p. 50)

Burns, T. and Sinfield, S. (2004) *Teaching, Learning and Study Skills: A guide for tutors*, London: Sage.

## 4. 39 'fails'



WD-40™ is now a best-selling product. It got its name from the fact that it took 39 attempts to make the correct formula. That means 39 'failed' attempts, but ultimately a very successful product. The 'fails' led to the correct formula that is on sale today.

Image: Flickrcc: <https://flic.kr/p/oJVBSN>

## Station B: attitudes and approaches to studying

### Instructions

This task has three steps.

**Step one.** Discuss the statement below in your group e.g. do you agree or disagree or are you unsure?  
(2 minutes)

**Step two.** Read through the information sheet and discuss the three questions on it, denoted with **Q.**  
(10 minutes)

**Step three.** Return to the original statement and discuss if/how your opinion has changed.  
(3 minutes)

### Statement:

The important things is to put the hours in and just get on with it, feelings about my assignments or my own potential don't come into it at the end of the day.

## Station B: attitudes and approaches to studying information sheet

The following three sections all explore how students' attitudes and self-belief can affect their experience and performance.

1. **Carol Dweck** is a psychologist who in 2006, wrote a ground breaking book (*Mindset How you can fulfil your potential*. New York: Random House) that highlighted how mindsets can shape our academic performance.

In short, Dweck's research illustrates that:

A fixed mindset of 'I'm not good at this because I find it difficult' limits your potential for success.

A growth mindset which doesn't see your abilities as fixed and welcomes problems and difficulties as ways of really learning increases your potential for success.

Dweck's findings suggest that students that are praised for the **effort** that they put into a task or **how they have responded to challenge** are more resilient and successful learners in comparison to students who are praised for being 'good' per se.

### Q: Why do you think this might be?

2. **Jo Boaler** (Professor of Mathematics Education at Stanford University) supports Dweck's studies:

"The implications of this mindset are profound - **students with a growth mindset work and learn more effectively**, displaying a desire for challenge and **resilience in the face of failure**. On the other hand, those with a 'fixed mindset' believe that you are either smart or you are not. When students with a fixed mindset fail or make a mistake they believe that they are just not smart and give up. Such students frequently avoid challenge, preferring instead to complete easier work on which they know they will succeed". (Boaler, 2013 p. 143)

### Q: Discuss what these implications might be.

Boaler, J. (2013) 'Ability and Mathematics: the mindset revolution that is reshaping education', Forum, 55 (1).

3. **Tom Burns and Sandra Sinfield** are the authors of numerous books on study skills for students. They argue that the way we talk and think about things matters.

Think about a difficult assignment you have coming up/ one that you are anxious about whilst reading the following quote:

"Work is always hard, tough and difficult – metaphors of struggle, tunnelling, searching and suffering might all be used. If such a student thinks about an assignment it will be in terms of the amount of effort they will have to put in and the unending struggle that they will have to endure rather than in the terms of the excitement, the challenge the glorious frisson of fear"!! (Burns and Sinfield, 2004, p. 55)

### Q: In your group, find positive words or phrases to replace these negative terms from Burns and Sinfield (2004) with:

- Problem
- Disaster
- 'if only I had'
- 'I should'

## Station C: Feel the fear and do it anyway!

### Instructions

This station focuses on overcoming fear and challenges.

**Step one.** Watch the movie clip (2 minutes)

**Step two.** Read through the information sheet and discuss the two questions denoted with **Q.** (6 minutes)

**Step three.** Susan Jeffers, author of *Feel the Fear And Do it Anyway* (2007), instructed us to do exactly as the title of her book says! As a group, what advice can you offer students with assignment worries to help them become more resilient, remembering that:

“To be able to move forward [you] must be able to look at any situation in which [you] find [yourself] and work out how you can take control of it – **or how [you] can move forward**”

You are in charge of:

Your decisions

Your actions

Your state of mind

The amount of effort you put in

Getting your work in on time

Getting good grades”

(Burns and Sinfield, 2004, p. 55)

(7 minutes)

Jeffers, S. (2007) *Feel the Fear and do it anyway: how to turn your fear and indecision into confidence and action*, New York: Random House

### Film clip:

<https://www.youtube.com/watch?v=jUBrovExQQU>

### Station C Feel the fear and do it anyway information sheet

Read the following statements thinking about how the movie clip might relate to them:

1. **Paul Sander and Lalage Sanders**, research how to measure and build students' academic confidence. They emphasise the important role that 'self-efficacy' plays in academic performance:

"Self-efficacy . . . influences the choices people make in specific situations, such as **whether to start a task**. It influences the **effort** people put into tasks and their **persistence**, especially when the "going gets tough". Furthermore, self-efficacy has not only a **psychological** effect, but also a **physiological effect**, affecting for instance, anxiety levels" (Parajes, 2002 as cited in Sander and Sanders, 2003 p. 3)

Sander, P. and Sanders, L. (2003) *Measuring confidence in academic study: a summary report*, University of Wales Institute, Cardiff.

2. **Tom Burns and Sandra Sinfield** write extensively about how fear and stress (if untackled) can impinge upon students' learning and performance:

"When looking at sport it is obvious that the mind can have a strong impact on how the body will perform . . . this is also true for academic study. We illustrate how low self-esteem has force in education, not least because it can lead to stress – and the release of the stress hormones **cortisol** and **adrenalin** . . . which reduces short-term memory and bring about the tunnel vision and focus necessary for safety – but which is counterproductive in education. For example, if a building is burning, you do not want to stop and wonder from whence the fire originated and whether or not there is an arsonist at work – you just need to flee the building. **However, in academic study the 'from whence' and 'I wonder if' questions are essential**" (Burns and Sinfield, 2004, p. 50)

**Q: What does this last sentence mean and how does it relate to academic work in your discipline?**

3. **Evolutionary psychologists** (e.g Baron- Cohen, 1997) argue that:

"fear, anxiety and even depression are a **legacy of evolution**. When an animal is on unfamiliar territory it is in danger of its life, hence a fear response is a survival mechanism. Unfortunately, as human beings we also have consciousness and consequently an awareness of our own fear that can inhibit us in ways that would never be true of an animal . . . but to be human is to constantly move into unfamiliar territory, to embrace risk. . . **And the more we listen to our fears, the more we will focus on our inadequacies – and the less we are likely to do. This can be especially difficult for the student who has so many new things to face, so many new challenges to embrace. If these changes are only viewed as problems and opportunities to fail then it becomes even more difficult to positively embrace education**" (Burns and Sinfield, 2004, pp. 52- 53)

4. **"fear is good**: fear is a wonderful indicator that we are doing new things, moving into new areas and undertaking new challenges. In this way fear is a good thing, it means that we are still growing, we are still alive. Arguably, if we are not experiencing some element of fears it means that we are stagnating . . . **try to see fear as an indicator of growth and welcome it**" (Burns and Sinfield, 2004, pp. 53- 54)

Burns, T. and Sinfield, S. (2004) *Teaching, Learning and Study Skills: A guide for tutors*, London: Sage

**Q: Thinking about how you have dealt with your fears before reading this information, how might you go about dealing with your fears in the future?**