

**EBOOK** 

# RESILIENCE & MOTIVATION

The **Teacher CPD**Academy.

There are too many factors influencing a student's success at school to count, but few as important as resilience and motivation. Apart from their impact on academic achievement, one of the key reasons why these matter so much is that educators, parents and guardians have the power to influence them.

So, in this ebook, we'll cover what resilience and motivation are, what actually nurtures them, how you can **foster the two in your classroom** and the impact they have on our students.



By teacherCPDacademy.com

It is the psychological equivalent of the chicken and the egg. Which comes first: success or motivation?

For years, the general assumption has been that the more we can help motivate students, the more likely they are to be successful. But is the basic equation of "more motivated = more likely to achieve success" always true? In other words, what if reversing the equation actually made it more powerful?

#### WHAT DOES THE RESEARCH SAY?

It's fair to say that one could write a whole literature review on this topic, which is sadly beyond the scope of this article. So, we thought we'd pick a few studies that give a good flavour of the research. Here is what they say...

#### Study #1

A large-scale meta-analysis looking at 132 studies explored the relationship between motivation and reading achievement in students. The researchers found that motivation did have an impact on reading achievement. But crucially, when tracked over time, they found a stronger impact from reading achievement on motivation.

Essentially, this means that achieving success in reading early led to higher motivation, and much more so than high motivation led to better reading performance.



# Study #2

This large-scale study tracked students from Germany, England, Australia and Japan to explore the impact between emotions and maths achievement. The researchers described their findings as "bi-directional": the more students enjoyed and took pride in their work, the higher their grades were. But the reverse was also true: the more success students had, the more pride and enjoyment they felt.

They also found a similar relationship for negative emotions. The more negative emotions that students experienced (i.e., anger, anxiety, shame, boredom and helplessness), the worse their grades were. And it's fair to assume that the worse their grades were, the more negative emotions students would experience afterwards.

# HOW DOES THIS LINK TO ROSENSHINE'S PRINCIPLES OF INSTRUCTION?

Rosenshine's 10 Principles of Instruction have become increasingly popular in education, as they provide a good overview and clear guidelines as to how we can help students learn.

Two of them ("Present information in small steps" and "Obtain a high success rate") underline the importance of ensuring students experience success in order to develop their confidence and motivation.

Combined with the above studies, this would suggest that although increased motivation can indeed lead to increased success, the reverse (i.e., success leads to motivation) may be:

- More powerful
- · More sustainable
- · More achievable

This is because achieving early success can trigger the start of a positive cycle, where success leads to motivation, which leads to more success, which leads to more motivation, and so on.



#### DO WE WANT COMPETENCE OR CONFIDENCE?

Through our work both with elite athletes and in education, we often get requests to help individuals improve their confidence. However, this is often not what people really need. Actually, what they really want is to help improve their competence. If they do that, they will also improve their confidence.

Equally, if we just improve someone's confidence, it doesn't necessarily improve their competence (see basically every bad but confident X Factor audition for proof). The same is true of motivation to an extent. Yes, it can lead to increased performance. But it doesn't always. And yet, if someone achieves success, they are more likely to achieve longer-lasting motivation.

# SO, WHERE DOES THIS LEAVE THINGS LIKE GROWTH MINDSET AND RESILIENCE?

If we take this to its logical conclusion and prioritise achieving success over "motivational interventions", what does this mean for popular strategies such as Growth Mindset and resilience? Do we even need them?

It is important not to throw the baby out with the bath water. Both the studies listed earlier in this blog do talk about the bi-directional nature of the relationship between success and motivation.

So, let's briefly take a look at Growth Mindset and resilience to see how they could compliment the "success to motivation" relationship:

- **Growth Mindset** This is the belief students have that they can improve. Achieving initial success can play a huge part in this belief, as each prior success acts as "proof" for them to draw on. Without this "evidence", this belief can be very fragile and more akin to blind faith and can crumble in the face of repeated failure.
- **Resilience** It's best to frame resilience as something that can be developed, rather than something that can be taught. Research has suggested that "focusing on development" and "strengthening confidence from a range of sources" would compliment the idea of banking successes along the way.



#### WHAT DOES THIS MEAN FOR EDUCATION?

The fact that success leads to motivation much more than motivation leads to success is good news for those in education. This lends itself to a number of concrete strategies, such as...

# **Ensure early wins**

One of the biggest predictors of confidence is prior success. Ensuring your students have some success at the start can help minimise any negative unhelpful stereotypical thoughts (such as "I am not a Maths person") and have a positive foundation to build on.

#### Consider how we use "motivational assemblies"

Positive and inspiring assemblies can be a really effective way of reinforcing key themes or beliefs to a large amount of students in one go. However, many have been deflated when their motivational assembly didn't lead to behaviour change.

That's not to say they haven't planted a seed that will later grow, but it is important not to get too down on ourselves if the assembly we spent ages preparing doesn't lead to instant turngrounds.

# Model your thought process

This can be a key strategy that helps actually achieve the initial success. Here are some key tips:

- · Be clear
- · Be consistent
- · Be concise
- Include several demonstrations, more if the skill being taught is complex

# Teach using strategies that lead to learning/success

If the research is leaning towards success leading to more motivation, then it is important we use teaching strategies that increase the chances of success.



Fortunately, there has been a whole heap of research on this, which includes the likes of Retrieval Practice, Spacing, Interleaving and Dual Coding.

#### Avoid information overload

The more we dig into the research, the more we think this fundamental concept underpins everything (both for memory and motivation).

This is partly why Cognitive Load Theory has drawn a lot of attention. Information overload can overwhelm fragile working memory (the technical term in the research is the Redundancy Effect), which can hinder learning.

As a result, if we ensure we don't overload students with excessive, irrelevant or redundant information, we increase the likelihood of success, which triggers the positive cycles.

#### **FINAL THOUGHTS**

On reflection, the chicken or egg comparison isn't quite right. When it comes to success and motivation, it shouldn't be viewed as either/or. It is clearly a combination of both, each serving their own purpose.

However, it is illuminating to consider the powerful impact that starting with success can have. Potentially, it can free up time spent on failed motivational interventions, and lead to longer-lasting and more robust motivation over time.





By teacherCPDacademy.com



At the Teacher CPD Academy, we're aware of how exciting new and useful psychological theories and concepts can be. But sometimes, in the rush to embrace those, the subject can become over-discussed and distorted.

"Resilience and adaptability" is one of those cases, where the lines have become blurred and both concepts get used interchangeably. And although connected, they are not the same thing. There's not much point in students knowing that they need to be resilient, or in teachers trying to improve student adaptability if they don't actually know what these things mean.

So, we should clarify: what is resilience? What is adaptability? And more importantly, how do you tell them apart?

## WHAT IS RESILIENCE?

Resilience is all about being able to cope in unexpected or difficult circumstances. It's the ability to persevere in the face of challenges, overcoming barriers and bouncing back after setbacks. It also involves learning from those setbacks, to help you better deal with them next time.

For example, students sometimes don't do as well in a test as they had hoped. Resilient students can accept this setback, learn from their mistakes, stay positive and work on how to do better next time. Or, when suffering from the stress of exams, resilient students can recognise their feelings and attempt to manage their stress using effective coping mechanisms.

Without resilience, students might instead get frustrated, believe that they can't get better and give up trying.



# WHAT IS ADAPTABILITY?

Adaptability, on the other hand, is being willing and able to adjust to changing conditions. This involves two elements:

- Being able to notice change
- Being able to find new approaches and alternatives to respond to this change

It's just like what Darwin said about "survival of the fittest". He did not mean the "fittest" necessarily as the quickest, cleverest, or strongest. Instead, he referred to the "fittest" as those most capable of adapting to changes in their environment.

Take, for example, the recent Covid-19 crisis, in which students have been subjected to many changes. The "fittest" students, those who managed to thrive through this period and continue to achieve well at school, are those who adapted to changes in their learning. This might have included motivating themselves to study independently when working from home and changing their study habits to suit this better.

# SO, WHAT'S THE DIFFERENCE?

While adaptability involves changing to manage under new conditions, resilience, through "bouncing back", implies the ability to revert to a previous, more positive state after experiencing some difficulty or challenge.

This is what, by definition, separates adaptability from resilience. However, we can break this down further into some specific differences between the two skills...

# **Adversity vs Change**

While resilience tends to be in response to some kind of adversity, stress or pressure, adaptability does not necessarily involve any kind of negative situation.

For example, a student might be moved up to a higher class in a particular subject. This change is not a bad thing, but will still require the student to adapt in some way, having to work harder to understand the class material for instance.

#### **Emotion vs Behaviour**

Resilience is primarily an emotional and psychological concept.



Showing resilience requires a certain level of emotional intelligence, since it involves being able to recognise your feelings and understanding how to harness them to help you cope well with a challenge.

In contrast, adaptability is more behavioural, since it is about adopting certain behaviours in response to change.

# Improving Resilience vs Adversity

Research suggests that helping students to develop a sense of perspective, encouraging them to stay physically and mentally healthy and offering them social support will help to foster their resilience.

Meanwhile, adaptability can be improved by developing students' creative thinking and problem solving skills, as this will help them to quickly find alternative approaches to respond and adapt to change.

### **BUT HOW ARE THEY CONNECTED?**

Although it's important to distinguish between resilience and adaptability, we can't ignore that they are intricately connected. Here are some ways:

# They're both important

Being able to persevere through challenges (resilience) and adapt to change (adaptability) are both key skills that will help students learn and thrive now and in the future.

# They interact in a feedback loop

Demonstrating resilience by bouncing back from setbacks often helps students to perform better in the future. This includes being able to adapt well to change. Similarly, when students experience change, they can find alternative approaches to respond to it. Adapting to change in this way will make them feel better about themselves, allowing them to be more resilient.

In practicing this resilience, students then prepare themselves to be more adaptable to future change. Notice the feedback loop? Therefore, the real value comes from students being able to combine the two skills.



# They're both related to mindset

Both skills are closely related to one unifying factor: mindset.

Research suggests that having a Growth Mindset makes you more adaptable and as such able to deal better with change and transitions, and also promotes resilience. So, to improve both resilience and adaptability in students, schools can start by working on their Growth Mindset.

#### **FINAL THOUGHTS**

Resilience and adaptability are distinct and separate concepts, and should be recognised in this way. However, the two do interact and, to have the most impact on student learning and development, we should aim to foster both skills in students.

Schools can do this by developing a Growth Mindset in their students. Master Growth Mindset, and adaptability and resilience should follow...





How can we best motivate others? Are previous strategies outdated and no longer relevant? What actually works best? Fortunately, research has now emerged that can better guide us in our quest to answer these questions.

There is a growing body of evidence that suggests that the old traditional "carrot vs stick" approach will not work. Essentially, motivating someone with rewards can reduce intrinsic motivation. Likewise, motivating someone with the fear of punishments may provide short-term compliance, but can reduce creativity and enhance the fear of failure.

So if that doesn't work, what will?

# 1. MASTER YOUR OWN MOTIVATION

By leading from the front, you can motivate the people around you effectively through your actions alone. Research in business leadership from King's College London has shown that a leader who is highly self-motivated allows their workforce to join them in their pursuit to achieve success.

Other research suggests that motivation is contagious, with people working harder when they are surrounded by like-minded individuals. This is why it is so important to surround yourself with a good team.

## 2. FIND YOUR "WHY?" AND CHANGE YOUR "HOW?"

Occasionally, we do tasks for the wrong reasons. Is it about showing off your skills or mastering a new area? Is it about proving or improving yourself? These questions are closely linked to developing a Growth Mindset.

Equally, if a task isn't going the way you think it should be, it may not be a case of working harder but of working smarter.



One way might not be the best way for you personally, or just as importantly, the best way for the people around you. Leaders in the workplace <a href="have found that">have found that</a> by being creative and understanding your team, you can devise different ways to complete tasks in a more effective and rewarding way just by changing your "how".

#### 3. TREAT EVERYONE AS INDIVIDUALS

The individuals you're trying to motivate will have a range of different personalities and therefore multiple motivators. Understanding the people around you will allow you, as the motivator, to get the best out of each person in a range of different situations.

Take time to understand the people you're working with and to create spaces where people can get to know one another better.

#### 4. HOW WILL THIS HELP THEM IN THE FUTURE?

Evidence suggests that by taking just 3 minutes to explain why a task will help someone in the future, they are much more likely to invest time and effort into it.

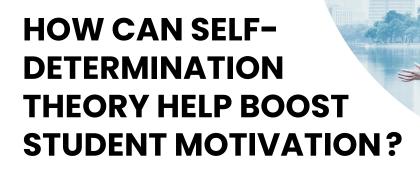
This has been found to be true in a range of different environments. This would suggest that we may have been doing lesson objectives wrong. It is not just the "what" that we should be covering, it is the "why".

#### 5. SETTING REALISTIC YET CHALLENGING GOALS

When trying to motivate a team of individuals, leaders can use this principle to increase the chance of positive outcomes.

Research from the University of Illinois has shown that setting goals correctly can help increase the motivation of students in the classroom, by improving concentration and focus, which in turn encourages them to partake in challenges and have a more positive attitude towards the class.







Motivation is an important predictor of learning and achievement. The hope is that the more motivated a student is, the greater dedication and attention they will pay to their studies. A well-studied theoretical explanation of motivation is the Self-Determination Theory. Understanding it can transform the way you teach and maximise your students' learning. So, here's what you need to know...

#### WHAT IS SELF-DETERMINATION THEORY?

Self-Determination Theory argues that students need to feel these three components to become motivated:

- Autonomy Feeling in control of their behaviours and goals
- **Competence** Believing that their actions will be impactful in shaping their academic success
- Relatedness Feeling a sense of belonging in class

These three factors need to be maintained and supported. The three motivation components may fluctuate due to a number of factors, including...

#### Extrinsic motivators

Extrinsic motivators can undermine autonomy. As students become increasingly controlled by external rewards, they feel less in control of their behaviour, and their intrinsic motivation diminishes.

This was shown in <u>a study</u> where students were asked to learn a set of Swahili-English word pairs. They found that the participants who were rewarded for learning the words spent



less time studying in their free time than participants who were not rewarded.

# Positive encouragement

Positive encouragement increases students' intrinsic motivation, as it helps to make them feel more competent. Research has found that positive feedback on students' performance makes them feel interested in their immediate task and motivates them to maintain their behaviour.

# Social support

Social support involves being cared for and having assistance available from others. Research has consistently shown that students with strong social support from their teachers and peers have greater internal motivation to learn, as they feel a sense of belonging in class.

# HOW CAN YOU USE SELF-DETERMINATION THEORY TO MOTIVATE STUDENTS?

So, how can you make sure these factors are always at a high level for your students?

Here are some strategies that can help you introduce the findings of Self-Determination Theory to your classroom and increase your students' motivation to learn...

#### **Build in success**

One of Rosenshine's Principles of Instruction is to ensure a high success rate. This is because previous performance is one of the biggest drivers of student self-efficacy. Being able to refer to a bank of previous positive outcomes can boost student confidence and motivation, especially when they are struggling with a piece of work. This, in turn, boosts their self-perception of their own competency levels.

#### Give quality feedback

Try to provide high quality feedback to your students. Let your students know when they improve on an exam or an assignment and ask them what strategies they used to improve. This can help increase their competence and relatedness, raising their motivation to learn.



# Encourage a sense of belonging

One way to develop a sense of belonging is to focus on strengthening relationships between you and your students and between students through team-building activities.

Some have tried to facilitate this, for example, by greeting students at the door when they arrive at class. However, this may be quite time-costly and not something everyone feels comfortable doing in their setting, but advocates of this would say it can help set a positive tone and foster a strong relationship between you and your class.

Consistently checking on each student's progress and well-being can also highlight to them that you care and that they "belong" in your setting.

#### Limit rewards

While it is fine to occasionally reward students for achievements, overdoing it can weaken your students' intrinsic motivation. Educational psychologist Jere Brophy recommends only rewarding students if they meet standards or skills that require a lot of practice or repetition.

So, try to deliver rewards alongside meaningful feedback (e.g., tell students specifically what they did well on a task and how they can improve) to boost their competence and increase their motivation.

# Give students (some) choices

Try to give your students some choices within their learning journey. However, this can be tricky, as students often aren't great predictors of what helps them learn best.

#### FINAL THOUGHTS

Self-Determination Theory offers a valuable insight into what it takes to increase students' motivation. When you support students' autonomy, competence and relatedness, it enhances their intrinsic motivation to learn. This is easier said than done, as motivation is complex, nuanced and in a constant state of flux. But in trying to do so, we can hopefully help develop independent, self-motivated and lifelong learners.







By teacherCPDacademy.com

How important are both IQ and motivation for students' success at school? This question is fundamental to helping our students fulfil their potential during their education.

Knowing the answer would help teachers, parents/guardians and policy makers target strategies that would have a better chance at making a positive and meaningful difference for students.

#### WHAT THE RESEARCH SAYS

A recent study went through all the existing research to try to answer how important are both IQ and motivation for student success whilst at school. They labelled this question as "one of the oldest in psychology".

To answer this, they combined the findings from 74 studies from across the world (these included studies from Australia, Austria, Belgium, Canada, China, Finland, Germany, Greece, India, Italy, the Netherlands, Nicaragua, Niger, Norway, Poland, Russia, Slovenia, Spain, Switzerland, Taiwan, Turkey, the United Kingdom and the USA) which involved over 80,000 students. They found that:

- The overall variance in schools achievement predicted by intelligence was 66.6%.
- The overall variance in school achievement predicted by motivation was 16.6%.

So clearly, a student's intelligence plays a big part. So much so that the researchers note that "intelligence is a strong and very important predictor of school achievement". So what does this mean for motivation? Scratch below the surface and two really interesting findings stand out...



# **Motivation seriously matters**

The researchers are at pains to point out that "it must be emphasized that motivation incrementally predicted school achievement above and beyond intelligence" and that their data "clearly attests the relevance of motivation for school achievement". Essentially, although intelligence predicted a larger variance in school achievement, motivation plays an additional and very significant role as well.

#### Not all motivation matters the same

Here is where it gets a little technical. The researchers highlight that motivation is not just one thing, but instead comprises of several factors that combine to make up how motivated someone is. Some of these factors were found to be far more important than others in terms of grades. These included both academic self-concept (i.e., if they viewed themselves as good learners in their subjects) and self-efficacy (i.e., if they believed they will have the ability to succeed in the future). The motivational constructs that mattered more in terms of the choices students make whilst they are in school included intrinsic motivation and their level of interest. So overall, different types of motivation have different implications.

# **HOW CAN TEACHERS IMPROVE STUDENT MOTIVATION?**

#### Increase their knowledge levels

Students who feel that they are good learners in their subject and believe they can further develop their skills are more motivated. Therefore, instead of trying to enhance motivation to improve achievement, it also makes sense to improve achievement to in turn boost motivation. We can do this by ensuring there are early successes before building up difficulty, as well as ensuring that we teach students in the most effective way possible. This includes the use of Retrieval Practice, Metacognition and Dual Coding, to name but a few.

## **High expectations**

Nobody rises to low expectations. There is now a wealth of research on the positive impact that having realistically high expectations has on students. High expectations obviously means different things to different people, especially depending on their



context, but at its core it is believing that every child can improve, learn and achieve more tomorrow than they did yesterday.

# Develop a sense of purpose towards learning

Recent research demonstrated that, if teachers emphasise the relevance of the content they are teaching, their students show increased levels of motivation. In one particular study, students who had been told about their attitude to Maths and the relevance of it later in their life were more motivated than their peers in the control group, with this effect being sustained for several months.

#### **FINAL THOUGHT**

Success at school is not only determined by a student's intelligence levels. Anyone who talks about "nature vs nurture" misses the point - it's always a combination of the two.

As well as working out what matters most, we also need to reflect on which aspects we can have the most impact on. Learning, improving and doing well at school is messy and complicated, and as such, there are no quick and simple fixes.

By helping students improve their knowledge and be motivated to learn and having high expectations for them, we can hopefully help them develop the tools needed to succeed both in and out of school.

