

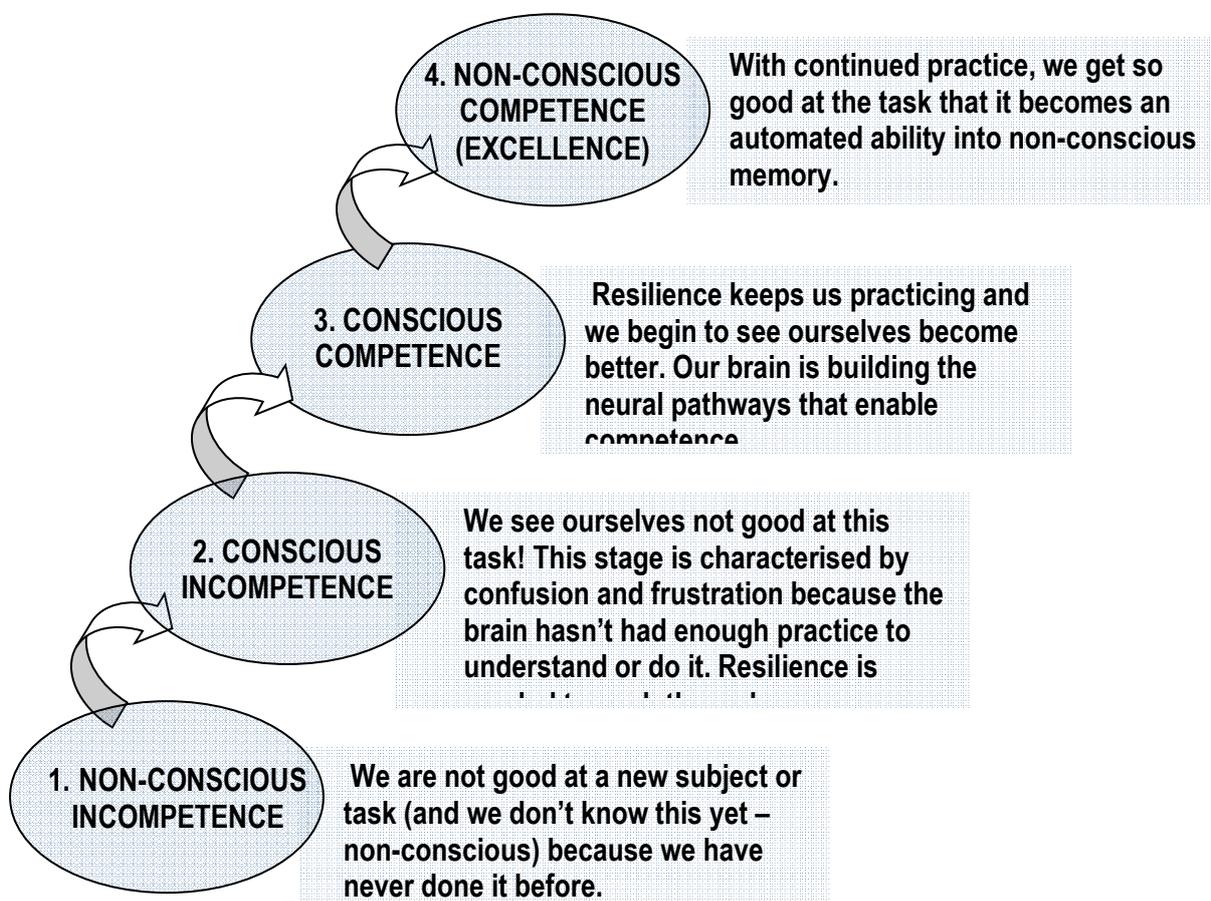
## RESILIENCE – THE KEY TO EXCELLENCE

In my travels about the country, I move in and out of secondary schools as an independent provider offering seminars and workshops on how to improve learning and exam results. In school staff-rooms and libraries, I often see the slogan ‘**Aim for Excellence**’ and I wonder to what extent this is actually understood and applied by people.

In terms of helping students to improve exam results, I think it is helpful to have a step-by-step strategy that enables practice.

I believe excellence, (being outstanding at something), is **developed through a mindset that focuses on achieving, then extending, our personal best**. This type of thinking creates a habit of resilience; a pattern of thinking and behaviour that inspires purposeful practice, despite any frustrations, challenges or obstacles experienced along the way. Learning to ride a bike or drive a car is a good analogy. In the beginning, it is natural that without practice, we find it difficult to drive well, but through resilience, we can push through the challenges and get to the point where we can get from A – B with ease - while thinking about something else!

Some psychologists have suggested there may be four ‘stages’ of learning that people pass through. These relate to how our knowledge and abilities are imprinted into memory. Sometimes we can become stuck at the lower stages, leaving our potential to excel unrealised. Let’s take a look at these four stages as they apply to exam preparation as well.



With recent brain research into neuroplasticity, we are discovering how adaptable the human brain's neural pathways can be. Students can learn to develop their abilities towards excellence in any subject or task, including exam preparation.

The brain changes to the demands placed on it. However, it is very easy to make a decision at the conscious incompetence stage, (when we see ourselves not being good at something), to stop practicing – to not place the demands on the brain. Students may find themselves forming the self-belief: *“Oh well, I’m just not good at studying...”* or *“I can’t write good essays.”* They may not realise that this **feeling of confusion and frustration is a natural part of the learning process**. It’s just the brain hasn’t fully developed the neural pathways to be able to understand a concept or do the ability we are attempting to master.

The same frustration can happen even more so with gifted students when they try to learn something new. With such high self-efficacy and esteem beliefs built from achieving excellence in the past, **these beliefs can intensify the frustration** because there is a mismatch between a memory of excellence and the actual experience of being in conscious incompetence. Some students may remove the frustration by giving up completely. Some may try to rationalise the ‘incompetence’ by brushing the task off as not being important. Some may find the resilience to push through the immediate challenge and persevere.

One of the leading psychologists in this area of learning resilience is Carole Dweck from Stanford University. Dweck suggests that students can develop either a growth or fixed mindset towards their learning. The fixed mindset is the idea that intelligence and abilities are fixed. Students believe they cannot change their ability to improve and therefore remain stuck. The growth mindset is the idea that through effort: i.e seeking help and trying new strategies, students can learn to improve their results.

The resilience that is learned by holding a growth mindset and overcoming challenges is driven by a student’s internal self-talk affirming their ability and thinking of ‘failure’ as part of the learning process. Dweck also found that external praise by parents and teachers made a big difference to whether they developed one or other mindsets. Those adults who praised students for their ability, i.e. *“Look how fast you did that – you must be so smart”* seemed to strengthen a fixed mindset. As the student progressed into more difficult learning tasks, they did not want to persevere for fear of appearing incompetent in the eyes of significant others. **Perhaps building academic resilience was prevented because the students were believed to be gifted?**

On the other hand, those adults who **praised students for their effort**, found that students were not so worried about making a mistake, but accepted this as part of the learning process and continued to practice the task until they found success. This strategy developed academic resilience.

Today, Dweck emphasises that we all have a mix of fixed and growth mindsets and through this awareness students can learn to develop academic resilience in their pursuit of excellence.

One key to finding the motivation and resilience to push through towards excellence is to **find personal value**. In other words, students need to have a strong desire to want to learn the task. When I ask students why they carried on persevering to learn to drive a car, despite not being good at it, they usually said the end-result was more important. Finding their independence; getting around quickly; helping friends, were all motivating reasons to want to learn to drive. So the value

created by the goal of learning to drive, was far greater than the confusion and frustration they felt at the time of passing through conscious incompetence.

When I make a comparison to learning to prepare for exams and learning to drive a car, they can see how a perceived lower value may have prevented them from persevering to get good at maths or writing better essays. There was no goal to activate the motivation needed to help drive them towards excellence.

For students, parents and teachers, it is helpful if you can 'paint a picture' of why this material is important to learn, set a goal, add some value (perhaps a bribe or two 😊), look at the consequences of not doing it, and see if they can develop the motivation to want to improve. **But it has to be each student's decision.** They will never achieve excellence if they are feeling coerced into *having to* do something that at some level, they do not want to do!

Here are some suggestions to help students and families understand resilience as a tool to achieve excellence.

1. Discuss as a family the four-stage learning model offered above and how confusion/frustration is natural part of the learning process. Ask if anyone can recount a time when they were frustrated trying to learn something new. For example, use the analogy of learning to drive a car.

If you have 'gifted' students, ask if they remember being in the 'conscious incompetent' stage and what strategy they used to pass through it. Explain that because of neuroplasticity research, academic intelligence is not fixed. The past does not have to equal the future!

2. Try to paint a picture of why learning a challenging task or subject is important and discuss their perspective. Encouraging them to find some value by looking for the benefits from the learning and setting a goal.
3. Help students make a decision about whether or not to proceed, and if they don't want to, think through the consequences of that decision. Help them see any negative consequences and if they don't want these to happen, emphasise as strongly as possible the positive consequences if they do decide to persevere. Again, it has to be their decision and if they decide not to persevere, enforce the consequences within your control. They have to learn to be accountable for their decisions.
4. Keep a personal interest in their progress. Supportive relationships are an essential component to learning resilience. Ask them what they are thinking when they are challenged with a subject. Remember, the habit of resilience is made through consistent thoughts and if those thoughts are "I can't...I can't...I can't", that will keep them habitually locked into the incompetence stages. Suggest they replace the "I can't do it!" thoughts with, "I can't do it yet!" or "I am just learning to do it!" thoughts. Positive self-talk is crucial to their success.

This resilience mindset can underpin the practise towards exam preparation. I use a five-step approach to prepare for exams. The first step covers everything discussed above. It is the foundation for the actions needed to want to practice the next steps.

The second step is to find a state of relaxation that enables the electrical activity in the brain to slow down to a brainwave state known as Alpha. This feels like a relaxed alertness that enables the brain to become more receptive. Coupled with this is the idea to practise by setting an intention. This is a brilliant technique for holding concentration so that attention is not diverted by distractions. While

relaxing, I suggest students set a mini-goal, (an intention), for the next segment of time. This directs the brain to hold attention and not notice surrounding stuff. If distractions are things that are considered more important, I suggest using them as a reward to maintain motivation – but after the effort has been put in.

The third step is to begin selecting key phrases and words out of larger content, that if memorised, could by association be recalled later in the exam. Condensing class notes into new study notes is essential because the brain has a hard time remembering lines on a page. By clustering key-words from class notes into concept maps and mind maps we access our faculty for visual association – thinking and remembering by using pictures and patterns.

These new condensed study notes can now be used for the fourth step – rehearsing for memory retention and understanding. Practising content is best done by verbalising the wider content behind the key word. Often, I hear stories of students rewriting their notes as a way to rehearse. This is time consuming and not very effective because the brain finds it difficult to remember words in lines. A much more efficient way to test recall is to verbalise the keywords from a mind map or concept map, see where the knowledge gaps are, review the wider content, then rehearse aloud again.

Rehearsing for recall and performance is the final step of this five-step approach. The final two weeks before an exam should be dedicated to a schedule that practices memory recall. This means, those subjects that require understanding, like maths and science should be practiced by answering lots of similar exam questions. Those subjects that require memory retention can be practiced by rehearsing the key words off a mind map and checking for knowledge gaps.

It is helpful to look for pockets of time during the day that can be used to rehearse content. 15 minutes in the back of the car while parents are in the supermarket can enable a fair amount of verbal revision from a handy mind map that is now a photo on a phone. So can 20 minutes of washing the dishes, 30 minutes exercising (if placed on audio), or 10 minutes in the shower, if the notes are laminated!

These five-steps followed sequentially, should provide the ‘how-to’ approach for effective study towards exams – a way to break through to exam excellence!

### **Useful Resources**

*Building an Intentional School Culture: Excellence in Academics and Character.* David Fulton and Charles F. Elbot (Currently at Fishpond for \$130.00)

*The Mind and the Brain: Neuroplasticity and the Power of Mental Focus.* Sharon Begley and Jeffery M. Schwartz. (Currently at Fishpond for \$30.00)

*Mindset – Change the way you think to fulfil your potential.* Carole Dweck.  
<http://mindsetonline.com/> (Currently at Fishpond for \$20.00)