

# The Parents Guide to High School Exams (Part 1)

If you have a desire to see your children do well at their activities, whether it is a sports match, a drama production or an examination, the impulse for most parents is to offer guidance. As a parent and an educator, I like to offer guidance and my particular field of interest is exam preparation.

My interest dates back to when I was in my last years of secondary school. I did not receive a lot of help from either my parents or teachers on how to prepare for exams and was basically instructed to read my class-notes repeatedly. Hopefully it would 'sink in'.

Unfortunately, despite my best efforts to prepare, I did not do particularly well. It wasn't until I went into tertiary education as an adult student that I started to learn exam revision techniques and dramatically improved my grades. One year, I topped my class and won an award for excellence. This was a turning point, for I realised that doing well in exams was not about how smart I was academically, but how smart I was in my preparation techniques. I began to see exam performance in the same way as music, drama or sports performance. Effective preparation was the key.

While many schools do a lot to help their students acquire skills for learning, my suspicion is that many students are not getting key skills for revision – and there is a big difference! So, when it comes to self-directed independent study at home, students may not be making the best use of the time they spend revising.

As a parent, one way to find out for yourself is to simply ask your son or daughter if they have ever been taught how to 'study'. Ask them if they know how their memory works, or if they use any techniques to help them remember their class notes. Then ask them if they use content rehearsal techniques to test their understanding and memory recall. If they answer "No" to any of these questions, then there is a need for some exam-preparation guidance.

My Master's research project explored questions like this in an attempt to assess how students prepare for exams. I have found that those students who can answer the above questions will perform better at exams than those who cannot.

So the next step is to know a little about how the human brain functions. When students learn new information, a physiological change is happening through an electrical / chemical process in the brain. Brain cells (neurons and astrocytes), are communicating and making new connections that are strengthened as the learned material is rehearsed. Thus, the key here is to know that physiologically, **academic intelligence is not fixed** and can be improved with consistent effort. If your children have not done as well as they would have liked in the past, remind them of this point. ***"The past does not equal the future"***. With specific preparation techniques, results can be dramatically improved and will help build confidence and motivation.

Because of the physiological demands made on the brain through the content revision process, students often get more tired and grumpy during this time, so it is wise not to make too many other demands on them. Try to give them space, particularly in those study weeks prior to exams.

One thing you can do is observe what and how they are eating and drinking. Nutrition and learning is an important area for parents to understand because so much research about learning and revision difficulties can be linked to inappropriate nutrition.

It is suggested that the brain absorbs around 20% of the air we breathe; 25% of our total blood flow; 30% of the water we drink and around 40% of the nutrients we consume through food. It is no wonder we can get 'brain fog' sometimes. In fact, this tiredness has a name: **neural system fatigue**.

One of the difficulties students have is maintaining their concentration. This is often due to inappropriate nutrition and not drinking enough water (dehydration). The brain's primary energy source is derived from carbohydrates (grains, fruits, vegetables), that break down through digestion to form a sugar called glucose. Further, the brain gets its nutrients through the blood supply, which is 83% water. This means that in order to maintain effective brain activity, concentration and alertness, we need to have a good supply of water. As a parent, you can monitor what your children are eating and drinking during the build up to exams, and make sure they have access to good quality food and encourage them to increase their water intake. If you have a chat to your local naturopath or health shop professional, you may also get some good ideas for supplements to aid healthy brain functioning.

Another aspect to the brain is that it has five main electrical frequencies (brainwaves) ranging within normal wakefulness (Gamma / Beta level) to sleep (Delta). In the middle of the range are two frequencies called Alpha level, which is a kind of relaxed alertness and Theta level, which is a very deep level of relaxation. This is useful for parents and students to know because, in the Alpha and Theta levels, the brain becomes more receptive to sensory input which strengthens memory retention. This means that if students can spend a few minutes relaxing before a revision session, their brain will be more receptive to incoming information. As a parent, you can reinforce this point and encourage them to take a few minutes to relax before a study session. One technique is to simply ask them to close their eyes, take a number of deep breaths and imagine any tension in the body going out with the out-breath. At the same time, they can say to themselves the words, "relax, relax, relax."

The other influence on the brain's attention process is what **value** they place on what is being revised. In other words, positive attitudes enhance attention. If your son or daughter is trying to revise and thinking: "this is boring; what's the point?" their attention will move easily away from the task. Distractions take over. So, the rule is: **only what is of value gets through**. You can help them construct value in what they are revising by asking them to set a mini goal, (what they want to accomplish in the time available), for every homework or revision session and what the reward will be for the effort they put in. State the desired outcome before commencing and then if they reward themselves for the effort, that treat will help their motivation as well.

It is surprising how often clear goals, a little relaxation, healthy food and plenty of water can enhance a revision session. The brain is primed and ready to receive. The next step then, is to know how to revise and re-write class notes in a fashion that aids memory recall. You can discover this in the Part 2 download of this article.