

**The Best Ways to Revise.**

We now know more than ever about the science of learning. Evidence from research suggests that there are certain strategies that help students learn more efficiently and more effectively. Knowing what does and doesn’t work will allow students to feel more in control and be better equipped for revision in the build up to their exams. As a result, they’ll have a better chance of acquiring and demonstrating their knowledge when it really counts.

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**1. How to revise effectively**

Not all revision strategies are equal. Some are far more effective than others. These proven strategies help students retain more information and increase their ability to recall them at a later date. These techniques include retrieval practice, spacing and interleaving.

**Retrieval Practice**

It’s not just how many hours of revision you do, it’s what you do in those hours that counts.

Retrieval practice (also known as the testing effect) is the name of a strategy which requires students to generate an answer to a question. It has been proven to be one of the most effective revision strategies. Retrieval practice may comprise of past papers, multiple choice tests or answering questions aloud. Flashcards are another good example of this.

**Spacing**

Spacing is another good revision technique that students can employ. This involves students learning a little information regularly, rather than trying to learn a lot in a single day.

Recent research has found that the use of spacing resulted in a 10% to 30% difference in final test results compared to students who did lots of cramming. Spacing out their revision gives students enough time to forget previously learnt information, meaning that when this information is re-visited and re-learnt it is more likely to be transferred to their long-term memory.

**Interleaving**

Interleaving involves students mixing up the topics they study within a given subject. Recent research has shown how effective this technique is: while students who ‘blocked’ their learning (the opposite to interleaving) performed to a higher level when tested immediately after learning the information, those who used interleaving performed more than three times better if the test was more than a day later.

Interleaving helps students make links between different topics as well as discriminate between different types of problems, allowing them to identify the most ideal thought process for each.

**A good study Partner**

This one comes with a warning attached, as students need to ensure that they are choosing a study partner for the right reasons rather than choosing someone who they believe will reduce their boredom and distract them from their revision.

A good study partner is someone who is motivated to revise, as research has shown that if the person next to you is working hard, it is likely that you will follow and increase your work ethic to match theirs.

Another study also found that if students are able to work together, for example on a problem-solving task, they are more likely to experiment with different techniques in order to try and solve it as well as learn faster from positive and negative feedback.

**2. How not to revise**

Having understood the ways in which one can revise effectively, it is important that students, parents and teachers are made aware of the mistakes and ineffective strategies students often try to use when revising.

**Cramming**

cramming, re-reading and revising with a mobile phone nearby or with music playing are all poor revision techniques.

Many students rely on cramming in hours of revision the day before an exam in a last-ditch attempt to try and prepare themselves. However, cramming should not be relied upon; and whilst it might make students feel as though they are learning more, this is an illusion. Instead, cramming can make students feel stressed, an emotion which is not ideal for exam preparation.

**Re-reading**

Recent research found that 84% of students re-read their notes when revising, whilst 55% claimed this was their number one strategy.

Such results make for worrying reading, as countless studies have proved the ineffectiveness of re-reading, showing that when students employ this strategy, they simply skim read the text. This means that the information is neither considered nor processed, and does not become embedded in the long-term memory.

**Distractions**

Multi-tasking is a myth. Revising with your phone next to you just doesn’t lead to better learning. Research has found that simply having a mobile phone out whilst revising causes a decrease in concentration and a reduction of 20% in performance. Similarly, revising with music on can distract students, with recent research showing that a quiet environment is preferable and leads to an exam performance that is 60% better than those who revise whilst listening to music with lyrics.

**3. how can teachers help students prepare for exams?**

**Teach Multiple strategies**

One way in which teachers can help students to prepare for exams is to teach them multiple strategies, which they can use to solve certain problems. Teachers can help students with revision by teaching them multiple effective strategies and adapting their lessons. This can help promote a growth mindset in students and aid their revision, such that if one revision strategy does not help them solve a problem, they have others that they can try. This makes them less likely to give up and instead they will persist with their revision for longer.

**Dual Coding**

Teachers can help their students retain more of the information taught in class by using dual coding, which involves giving students two representations of the same information (i.e., one being words and the other being pictures).

Dual coding would work very well in many lessons; for example, when learning about the different part of the heart in GCSE Biology, a teacher could give students a diagram of the heart alongside an explanation of the functions of the different areas. Having two representations of the same information helps students cement the information in their long-term memory.

**Managing nerves**

All humans fear the unknown to some extent, which is why exams are often stressful: students have no way of knowing what questions will be presented to them.

One way in which teachers can help students cope with the pressures of exams is by encouraging them to keep a diary. Keeping a diary of the thoughts and emotions that they feel uncomfortable with can enable them to develop a sense of control and reduce their levels of anxiety.

**4. How can parents help their child prepare for exams?**

**Minimise Distractions**

One way in which parents can help their child to achieve is by ensuring that they are revising without any distractions present.

One of the most common distractions nowadays is a mobile phone. Parents ensuring that their child does not revise with their children tend to mirror their parents. By managing their own stress levels, they automatically help their child do the same. Phone within arm’s reach will give these students a better chance of doing well and staying focused. The short-term pain of removing a phone will almost certainly be worth the long-term gain.

**Help with revision**

Parents can help their children with revision through using retrieval practice (i.e., having to generate an answer to a question). This can be achieved in a number of ways: for example, parents could test their child on flashcards, or create multiple choice or essay questions based on the subject material. Even more simply, parents could print off and collate relevant past paper questions for their child to attempt.

**Support your Child to achieve**

One of the largest studies which investigated parental behaviour and the impact it had on a child’s achievement demonstrated that high parental expectations lead to higher academic achievement. However, it is important that these realistically high expectations are accompanied with social support, so that the child doesn’t become stressed and feel a huge pressure to excel.

**Help them Cope with setbacks**

The exam period is a highly stressful time, and some exams may not go as well as the student would have hoped. When this scenario occurs, a parent’s reaction to this can be key as to whether or not the child overcomes the setback. Parents should try and view the child’s mistakes, however frustrating, as an opportunity for learning rather than a judgment on their ability, as this helps the development of a growth mindset, causing the child to believe that they can do better next time.

**5. How to manage the pressure of exams**

Feeling nervous about an upcoming exam is natural and something that the majority of students experience.

However, if students are able to develop a positive mindset and prepare well, they can manage these nerves.

A practiced, consistent and well thought out exam routine can help settle nerves and allow students to feel more in control of their situation.

Often, the students who perform the best when under pressure are those who have practiced strategies that can be used to overcome test anxiety and who have consistent routines that they employ the night before and the morning of an exam.

**What to do the night before an exam**

**Get a Good Night’s Sleep**

Students should not stay up late the night before an exam trying to cram in some last-minute revision, as it is unlikely, they will retain any new information at this point.

Instead, getting a good night’s sleep would be more beneficial, as research has demonstrated that sleep deprivation can lead to lower levels of concentration, poorer memory performance and an increased focus on negative aspects, all of which could lower exam performance.

**Remind Yourself of Your Previous Best**

The night before an exam, students should think about other previous exams in which they excelled and the strategies they employed to achieve this, so that they can implement them again. Using such methods should help improve student confidence and install the belief that their good preparation can allow them to perform well again.

**What to Do on the Morning of an exam**

**Eat Breakfast**

Recent research has demonstrated that not eating breakfast can have detrimental effects on a student’s performance in exams, such that the odds of achieving an above average score in a test are twice as high if students eat breakfast.

Not eating breakfast leads to a reduction in memory and lowers student’s concentration levels.

**Avoid anxious students**

Recent research has shown that emotions are contagious; therefore, when students see others acting anxiously before an exam, they too experience an increase in their cortisol levels, which makes them feel more nervous. So, before an exam, students should try and avoid those they believe will make them feel anxious, and instead engage in non-exam related conversations with calmer students.

**Take Deep Breaths**

When students feel themselves getting anxious, they should focus on taking some deep breaths. By slowing their breathing, students should experience a reduction in their heart rate and feel their bodies moving closer to a state of psychological rest, where they can regain control of their emotions and situation.

**6. How many hours a day should students spend revising?**

Students often ask: “How many hours of revision is enough?” However, for revision it seems that there is no set number of hours students should be doing, as often it is about both quality and quantity.

Students need effective time-management and strategies, and to avoid distractions.

The Student Room recommends 15-20 hours per week (which equates to only 2-3 hours per day), whereas a former Headmaster of Harrow recommends 7 hours of revision per day during the holidays. With such varied recommendations, it may be an impossible question to answer, and instead students need to experiment to see what works for them.

A growing body of research has found that taking short breaks can play a key role in the learning process. During these breaks, it may be a good idea for students to exercise, even if this only involves going for a short walk. Recent research demonstrated that taking a short walk for just 12 minutes can improve happiness, attentiveness and confidence, all of which would be useful for students taking exams.

**7. FAQ’s (Frequently Asked Questions)**

**What is the best revision strategy?**

Experts believe that one of the most effective revision strategies is retrieval practice. This means doing an activity that requires an answer to a question, cementing this knowledge in the long-term memory. Examples of retrieval practice include past papers, quizzes, multiple choice tests or simply having someone ask questions about study topics.

**Should I listen to music whilst revising?**

Probably not. Many people believe that revising with music improves their mood and level of motivation. However, whilst this may be true, listening to music with lyrics can hinder the learning of complex information and damage later recall as it competes for your attention and distracts you.

**How many hours a day should I revise?**

There is no set number, but the more you do, the more likely you are to remember the material. However, it is not all about quantity, quality makes a difference too. Therefore, it is important to space out your revision, minimise distractions and do lots of practice tests.

**How do I stop my phone from distracting me when I’m revising?**

The easiest way to do this is by turning it off! If you can’t manage that, put your phone on airplane mode. Alternatively, try telling people when you’ll be available to avoid unwanted distractions whilst you work, or download a free app to help you control your screen time.

**8. For additional further reading we recommend…**

Speak to Mr Fillingham, your form tutor, the staff who teach you.

Links:

A helpful overview of the different revision techniques: [Revision Techniques by the BBC.](https://www.bbc.co.uk/news/health-22565912)

An article from The Times Education Supplement on revision: [A TES article exploring the best ways to revise.](https://www.tes.com/magazine/archive/five-tips-cognitive-science-best-ways-revise)