

By Padraig Lawlor, Brenda Morgan & Philip O'Callaghan

Table of Contents

Step 1 - Keep Your Brain Fit	3
Step 2 - Set Clear Goals	6
Step 3 - Know your Learning Style	8
Step 4 - Study Environment	9
Step 5 - Use Effective Tools to Organise and Recall Information	10
Step 6 - Regular Review	14
Step 7 - Past Papers: the Key to Success	16 ⁰⁰ S
Final Step - Approach the Examination Day with Confidence	18
Tools	
Know Goals Clear Goals	
Brain Environment	
Fit Review	
Past Papers	

STEP 1 Keep Your Brain Fit

As a student it is important that your brain is fit. When your brain is fit, you are maintaining your mental edge

Studying is a win-win situation for your brain and the fitter your brain is the better prepared you are to cope with the challenges of the exams which lie ahead of you.

There are four key ways you can improve your brain

- Physical Activity
- Diet
- Adequate Sleep
- Stress Management



Physical Activity

Over the last few years clear evidence has emerged that increasing physical activity will increase our brain's capacity. Studies have found that

- · Enhances memory and learning
- Improves mood and counteracts depression
- Pumps more blood to the brain
- Increases the rate at which new brain cells are generated.

So in summary,

exercise makes you smarter!!



So as a student it is important that you time to play and be active. This could be structured in a sport like rugby or football, hurling, or swimming. Ride a bike, or just go for a walk. Just to maintain and improve your brain function,

you should be getting
40 - 50 minutes exercise 3 - 4 times a week.

Diet

While it can be difficult to know what is healthy diet is due to conflicting dietary advice, there is a general consensus that the following foods are good for your brain and will help you learn:

- Vegetables studies have shown that people that eat more vegetables at mentally fitter that those that eat less.
- Fatty Fish Fish such as Salmon, Tuna and Mackerel which contain lots of Omega-3 fatty acids have a beneficial effect on the brain.
- Whole Grains Diets rich in whole grains such a brown rice, whole wheat bread and pasta is closely linked to brain health.
- Fruit Full of essential vitamins and nutrients. Fruits such as blueberries are particularly good for the brain and are known as super foods.

And very importantly, **drink lots of water**. The body is approximately 75% water, the brain is approximately 85% water so it is essential that you continually hydrate it during your study periods. Otherwise, you will become lethargic and tired and unable to concentrate and study.



As a student you should avoid, processed carbohydrates, refined sugars, caffeine and saturated fats. All these foods turn off the thinking part of your brain.

Adequate Sleep

Get a good night's sleep - 8 hours is essential for most young people if they are to perform at their best.

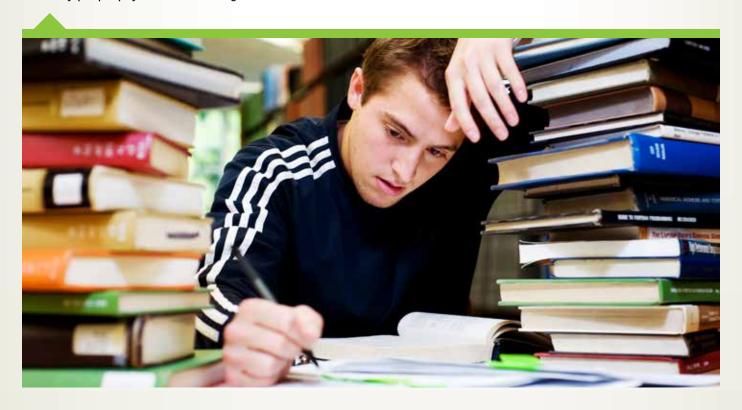
A proper night's sleep is important for memory consolidation and retention. In studies, young people who are deprived of sleep generally score significantly worse on memory and cognitive tests.

As a student, you should not underestimate the importance of a good night sleep, preferably between the hours of 10 p.m. and 6 a.m. which is when we get deep sleep (rapid eye movement sleep, REM).



Stress Management

A certain amount of stress is very healthy – it makes us get to work. However, if you become too stressed and overwhelmed your brain just shuts down and you are unable to think. It is essential that you take time out to destress you body and brain so that you can be in an optimum state for learning. For many people physical exercise is great to de-stress.



Mediation has also been shown to be help people relax and get their brain back to peak state.



"If you had one shot, one opportunity, to seize everything you ever wanted, would you capture it, or let it slip?"

Eminem

We know in sport you cannot win, unless you can count the score. It is the same way with you, unless you are clear on what you want to achieve, how can you ever look back and say you have achieved your goals?

As you are preparing for an examination, you should be crystal clear on what you want to achieve. You should also be clear on why you want to achieve it. When you are clear on why you want to achieve it you will remain motivated and focused when you might be otherwise distracted.

"When you are inspired by some great purpose, some extraordinary project, all your thoughts break their bonds: Your mind transcends limitations, your consciousness expands in every direction, and you find yourself in a new, great, and wonderful world. Dormant forces, faculties and talents become alive, and your discover yourself to be a greater person by far than you ever dreamed yourself to be." Patanjali

So, lets be clear on why you are here and complete the grid below and lets get a specific as you can.

Course of Interest		
Points Required		
Subject	Grade Required	Points Awarded

Total Points:

Under 'Course of Interest', write the name of the course you wish to pursue after successfully completing your exams. In the section 'Points Required' write down the number of points required.

Under the 'Subject' column, list the subjects you are studying and put H or O in brackets in the same column to indicate whether you are doing them at higher or ordinary level.

In the middle column 'Grade Require put down the grade that you know you are capable of getting if you work this year. Finally, convert the grades to points and just to make sure there is no confusion have listed both the higher and ordinary level Leaving Certificate points here for you.

Now, add your total at the end and remember you can only include the best 6 subjects. How does it look? Would you be happy with these results?

Now your brain is dealing with specifics. Now you know exactly what grade you have to get in each of your subjects to add up to those points. Now your brain is involved because you are being specific and positive.

Now, these grades might become your academic goals for the year.

Higher Level		Ordinary Level	
	100	A1	
	90	A2	
	85	B1	
	80	B2	
	75	В3	
	70	C1	
	65	C2	
	60	C3	
	55	D1	
	50	D2	
3	45	DЗ	

LCVP	Percent	Points
Distinction	80% - 100%	70
Merit	65% - 79%	50
Pass	50% - 64%	30

Teachers ask students to learn a lot of content. But often they don't teach them how to learn. We take in information in 3 unique ways:

Visual with our eyes



Auditory
with our ears



Kinesthetic

by doing or by feeling



Visual learners process information best through their eyes. They need to look at the board, look at the book and look at the teacher to learn best. If the teacher walks to the back of the room, if you are visual, you will follow the teacher with your eyes wondering 'where is she going? Visuals learners love color, doodling, and drawing pictures of the content or mind mapping can really help.

Auditory learners enjoy explaining information to others, and songs or rhymes are good ways to remember content. They learn through discussion, maybe hearing it in the teachers' voice and listening to information on an iPod, etc.

Kinesthetic learners enjoy a 'hands-on' approach – from projects and role playing to empathising with a character's feelings. Kinesthetic learners are movers and shakers they like swinging on their chair, tapping their pen, twisting their hai.

There are a number of simple assessments which you can do to determine your learning style. We recommend that you take one of these as once you know your learning style you will be better equipped to study in a manner which best supports you as a learner.

You should have an organised environment to work in. An organised space reflects an organised mind. Avoid clutter because it will clutter your mind.

Have you ever tried to read or do homework while lying in bed? A few minutes pass, and slowly you lose focus, your eyes glaze over, and soon you're headed to dream land. This happens because our brains and our body are constantly sending messages back and forth. When you lie down, the message you send to your brain is that it's time to sleep.

The position of our body tremendously effects how well we learn. If you read while hunched over with your book in your lap, you will inevitably become tired. Hunching stifles our breathing, and slightly lessens the flow of oxygen to our brain. Instead, sit up straight in a comfortable chair with your schoolwork about 14 inches from your eyes. This tells our brain to stay alert.

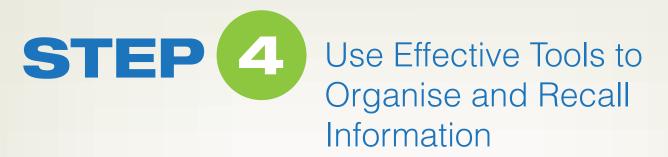
Ideally, you should be a designated space in your house \square a quite space where you can work undisturbed. If you do this you will program your mind to know that whenever you sit in that spot then it's study time. Your brain will suddenly switch on. Even if you don't really feel like studying, if you sit in that place your brain will associate 'Study time' with sitting there and you will be amazed how quickly you get things done.

Another point if you like listening to music the only music that aids learning is classical music, and a very particular type of classical music. Music actually lowers your brain waves to what is called the Alpha state. We won't get into the science of it except to say that in normal activity your brain waves run in the Beta State, around 13-20 Hertz, while the best state for learning is the Alpha State 8-12 Hertz. Alpha State helps calm the body and focus the brain, allowing our brain to take in information in the most efficient possible way.



Music for learning can be purchased through The Super Generation website, www.thesupergeneration.com

For your next assignments, make sure that you avoid studying in bed, and choose a nice chair while sitting up. It makes a subtle but important difference.



There are three steps to effective learning:

STEP 1 - UNDERSTAND

Classes in school help you to increase your understanding of new information. The teachers explain new concepts and key points in class so you must be attentive and actively engage in this part of the learning process.

STEP 2 - ORGANISE

After class you must organise and store this new information in a structure which allows you to recall it with ease. Later in this section you learn how to organise the information using Mind Mapping, a powerful learning tool.

STEP 3 - RECALL

You are tested regularly to ensure that you successfully recall the new information. We will show you a great method to help your recall.



Organise using Mind mapping

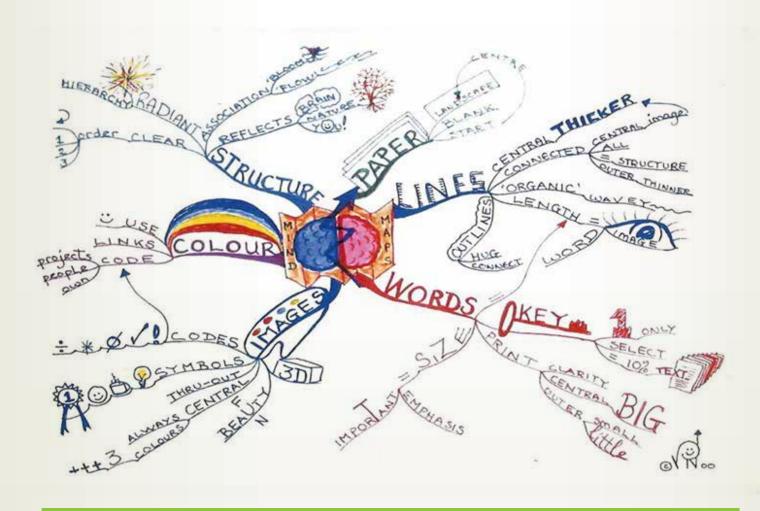
Mind mapping is a visual way of taking notes that uses pictures, symbols, and words. Created by Tony Buzan, it's simple, fun, and helpful. We can use it to review entire chapters in history, remember concepts it science, or as a graphic organiser before we write an essay.

It works because we use what our brain prefers. Try this; imagine an orange. Do you see that delicious fruit? Most of us do. Some see the color orange, but few imagine the letters "o-r-a-n-g-e." That's because our brains think in pictures and colors.

Here's how to do it:

- 1. Using Mr. Buzan's method, draw an image in the center of the page. This is the key concept and should include 3 colors such as red, blue, and green.
- Draw a 'branch' connected to the center concept, getting thinner as it moves out.
- 3. The line should be the same length as the word it supports.
- 4. Each sub-branch is content that is associated with the main topic.
- Include images help you remember the content. For instance, use a light bulb for an invention in history. For a theme like love in a book, draw a heart.
- 6. Write key words in CAPITAL letters, and support words in lower case letters.
- Each word gets its own line.
- 8. For each new concept, use a different main color.
- Symbols, codes, and images can use any color you prefer.

Mind mapping is; pardon the pun, a no-brainer. Research confirms that it enhances memory over traditional note taking, so start practicing on your next assignment.



A Mind Map on how to create a mind map.

Recall using Memory Techniques

Association & Imagination are the key to memory. So often we try to learn information but we don't try to learn it the right way. To do so, we need 2 very important ingredients: Association and imagination, or Al.

Association – Have you ever heard a song and it instantly reminds you of a past memory? The story, lyrics, or both begin flowing easily from your long term memory. That is because you have taken content, in this case a song, and associated it with a feeling from the past. It's no longer arbitrary, but rather has meaning. We can apply the same notion to our school work.

Imagination – We know from mind-mapping that our brain thinks in pictures and colors. When making associations, our brain more easily remembers things that are bizarre, zany, and stand out. When learning content, stretch your imagination to make wild and unique connections.

Let's apply AI to content. Use a funny phrase to remember the order of the planets in our solar system. For instance, "My Very Eager Mother Just Served Us Noodles" to remind you of Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto.

The Journey Method

The Journey Method uses association and imagination and is used by some of the world's top memory champions to recall information. So, it may be worth your while knowing how to apply it and you don't need to physically go anywhere! By using association and imagination (AI) and things that are already familiar to us, we can link information and recall it easily.

When we go on a journey, select a location that is very familiar. Use the rooms in your house, or the route to school or the park. Each room will then become a mental landmark. We associate one position in the room with one piece of content (i.e. the front door, the wall behind the fire place, etc). Let's try to remember 10 of the greatest inventions of all time, and use a house to demonstrate the journey method.

- 1. Light bulb
- 2. Car
- 3. Airplane
- 4. Wheel
- 5. Camera

- 6. Telephone
- 7. Printing press
- 8. Glasses/spectacles
- 9. Indoor bathroom
- 10. Washing machine

Approaching my 1st location, I see a huge porch **light shining a light brightly into my eyes**. The light bulb is the strongest I have ever seen. As I move to my 2nd location, I notice my parents car, however, the car has been badly damaged in a crash. I hope nobody was hurt. I am beginning to feel upset.

I move to the 3rd location and I notice my little brother's toy airplane, It is falling from the sky and is disintegrating into pieces.

In the 4th location I see a wheel of cheese, boy that's random! I'm not hungry so I run to the 5th location where I gazing at our family pictures (camera) on the wall. Some of them are going back years. They bring up great memories.

As I move to the 6th location, I hear my cell phone ringing and I grab it from my pocket, It is my dad who asks me to go to the 7th location, and what do I see, but my Dad there reading the newspaper (printing press). Nothing changes, how dad always loves reading the newspaper.

Then I move to the 8th location, I see my father's reading glasses, they are the ones he used when I was young. They are all broken and dusty. I wonder why they are there.

In the 9th location, I see an old man in a bathroom, is it my grandfather. It seems to be the first time he used a bathroom and is confused about how it works. He feels really lucky.

And finally, I move to the 10th location, here I see my mother putting the families clothes into the washing machine. It is the biggest washing machine I have ever seen. All the family clothes fit into it.

Now, run through the story again and remember the 10 inventions. Now, list them backwards and also list them at random, like, the 1st, the 5th, etc. Remembering is easy, if you use the correct tools to help you remember.

Try different journeys for different subjects.



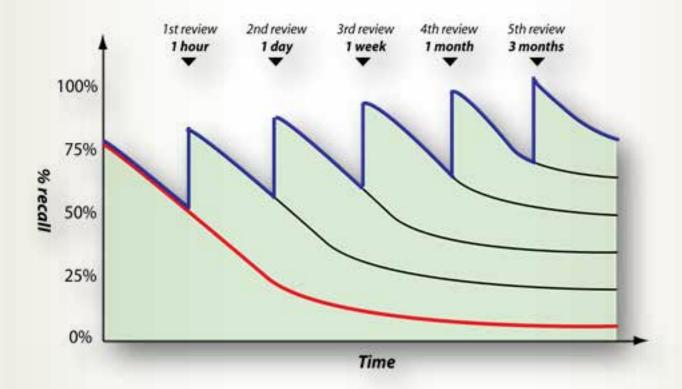


And the third key to memory is Repetition. Not just once, but whatever you learn you must repeat and review approximately five times.

When you learn something in class it goes into your short term memory. You must review it regularly for it to go into your long term memory and for it to be available for recall during your examinations.

Your short term memory is found in your thinking brain while you long term memory is found in your emotional brain. In order to get something from you short term memory into your long term memory you must review it 5 times.

But there is a very important timeframe for these reviews as this diagram shows.



If you want information to go into your long term memory your brain needs to see it briefly but frequently. One hour, one day, one week, one month and three months. You write these into your diary to remind you. Why?

Well you are not going to remember to review them on that date, so when you look at your diary it will do the reminding for you.

Let's say you are studying history and you have just written out a full answer on, the causes of World War II. You have gathered all your information and you have completed the question, which is an exam paper question.

You have put it into your filing system and you know where to put your hand on it when you need it.

Say today is September 12th and you have it completed. In your school diary you will write down **History WWII** on Sept 12th, one day, Sept 13th you will write down History WWII.

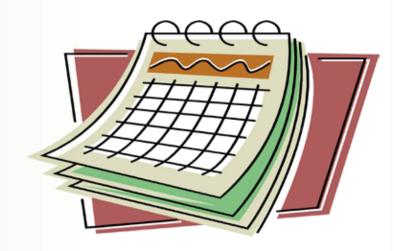
One week, Sept 19th you will write down History WWII, one month, three months and six months, History WWII.

When you get to Sept 19th in your diary and see History WWII that will remind you to review it.

You will go to your filing system and take out the question and spend five minutes reading it.

When you are done you put it back into your filing system and continue with your night's work. Is it possible that it could be that simple?

Yes.



Remember your brain wants to see something briefly but frequently and when you do this you are reminding your brain of its importance and it will remember it.

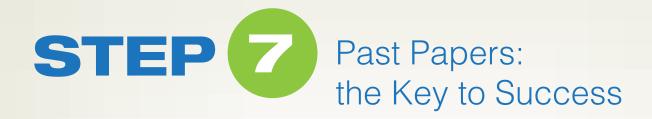
As you learn new content, don't just plough through, but review it regularly.

Here's what it can look like:

- 1 hour Stop each hour by quizzing yourself on current material.
- 1 day Using your notes from the previous day, take 10 minutes and go over what you learned.
- 1 week Create a mind map for that week's content.
- 1 month Effective for unit exams and chapter tests
- 1 term (i.e. 3 months) Helps during final exams

The goal is to practice good habits so that you'll not only understand what you do in class, but can recall it as well in examinations. Frequent review limits the need to spend time cramming just before tests.

As an extra learning tip, if you review your notes just before bed, your brain will actually process the information while you sleep. Talk about working smarter not harder.



Many students seem to think that studying is reading the text book over and over again? That is possibly one of the most **ineffective** ways to study! It's a huge waste of time and totally boring for your brain.

Others believe studying is reading the chapter of the text book and notes and summarising it — in your own note format? That is possibly the second most ineffective way to study! Again, a huge waste of time, valuable time that you cannot waste.

So, what is study? **Study is not subject practice but exam practice.** It is where you take that you've done in class and homework and see where and how it comes up in the exams.

Imagine you pile all the text books you use for one of your subjects. Think of all the chapters in that book and then imagine the notes you have been given in class, just place them on top of the pile. Sometimes students purchase revision books, pile them on top. And finally you might receive 'good' notes from someone. Pile it on. Just imagine all that information that you are expected to get through. It's enormous isn't it and that is just for one subject!

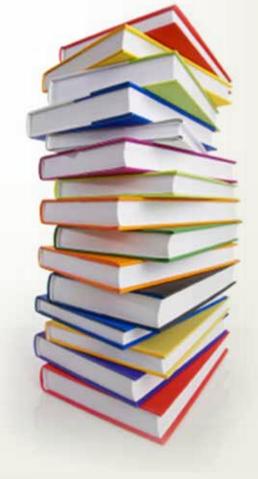
Maybe you have six or more other subjects. Some students have ten, eleven or even twelve more subjects to study. Pile them all on!

Just imagine all the books and notes and you suddenly have a small mountain of information.

However, it is estimated you are only asked between 20-30% of the subject itself in any exam.

Some students feel that they need to know everything, every little detail of every section of every subject to be really prepared for the exams. Far too many students believe that to be prepared for their exams they are required to plough through mountains of books, piece by piece by piece.





You learn the first piece and move to the next. You learn the second piece and you forget the first. You begin the third piece and the second begins to fade. And you begin to panic and go back to the beginning again. Round in circles and getting more and more frustrated.

This is crazy and a huge waste of time. The pressure that approach puts on you is intense, unnecessary and well, it's unhealthy. A student like this is studying hard, not studying smart.

Instead your past papers should become your best friend. You should be totally familiar with the structure and layout of each paper and also the requirements. When you are reviewing a topic, you should answer examination questions and get your teacher to assess them (many teachers will be happy to do this). There should only be need for you to go to the mountain of books when you need support information or additional detail for my answer.

When you revise a specific topic, review your mind maps and get back to your exam papers as fast as you can.

Some students don't even look at past exam papers and past exam questions until days before their exams. Madness. Some teachers are very focused on completing the syllabus, and leave exam question preparation to the last minute. You can't wait.

You must use the past papers to study effectively. The past papers are your new best friend. Those who get to the exam questions are studying smart. They are focusing on that 20-30%, 100% of the time.

Average students who study smart get above average and even excellent exam results.

It makes perfect sense. So, when you are studying you are spending your time working with, practicing and exploring the past exam papers. You can never use past exam papers early enough. The exam papers focus your mind from the big broad, far too long subject down to the narrow, exact, relevant questions.

Another thing I would also like to share with you is that the exams themselves are very predictable. Anyone who is willing to sit with past papers for an hour looking at trends will see a pattern emerge very quickly.

Why is this? Well, be clear on one thing, the exam papers are not set to catch you out. The papers are set to allow you to win not to lose. As a result they can be very general and very predictable.



8 hours of exam paper focused work is easily worth 20 hours of reading the book and taking notes. Exam paper work is studying smart, not studying hard.

FINAL STEP

Approach the Examination Day with Confidence

Whatever happens remain Calm, Positive, and Optimistic.

If you have prepared well, you will do well. A state of relaxed alertness is the best for study and examinations.

If you do get emotional on examination stay, take four deep breaths and you will become calm again, and in this state of relaxed alertness you will do yourself justice on examination day.



