

## Chapter 1 : Presentation Aids: Design and Usage

*Overall the use of memory aids assisted individuals in completing tasks as opposed to no memory aids. During the Google Calendar intervention phase, there was % increase in completing their prospective intention compared to the standard diary phase.*

Identify and treat health problems Take practical steps to support learning and memory Tip 1: You have to shake things up from time to time! But not all activities are equal. The best brain exercises break your routine and challenge you to use and develop new brain pathways. Four key elements of a good brain-boosting activity It teaches you something new. To strengthen the brain, you need to keep learning and developing new skills. The best brain-boosting activities demand your full and close attention. It must still be something that requires mental effort. For example, learning to play a challenging new piece of music counts. Look for activities that allow you to start at an easy level and work your way up as your skills improve – always pushing the envelope so you continue to stretch your capabilities. So choose activities that, while challenging, are still enjoyable and satisfying. Any of these activities can help you improve your memory, so long as they keep you challenged and engaged. What about brain-training programs? There are countless brain-training apps and online programs that promise to boost memory, problem-solving, attention, and even IQ with daily practice. But do they really work? Increasingly, the evidence says no. It increases oxygen to your brain and reduces the risk for disorders that lead to memory loss, such as diabetes and cardiovascular disease. Exercise also enhances the effects of helpful brain chemicals and reduces stress hormones. Perhaps most importantly, exercise plays an important role in neuroplasticity by boosting growth factors and stimulating new neuronal connections. Brain-boosting exercise tips Aerobic exercise is particularly good for the brain, so choose activities that keep your blood pumping. In general, anything that is good for your heart is great for your brain. Does it take you long time to clear out the sleep fog when you wake up? If so, you may find that exercising in the morning before you start your day makes a big difference. In addition to clearing out the cobwebs, it also primes you for learning throughout the day. Physical activities that require hand-eye coordination or complex motor skills are particularly beneficial for brain building. Exercise breaks can help you get past mental fatigue and afternoon slumps. Even a short walk or a few jumping jacks can be enough to reboot your brain. If you are experiencing traumatic stress or find yourself stuck in repetitive, unhealthy behavior Try exercising the muscles connected to fight-or-flight with attention. Exercises that use both your arms and legs – and are done in a focused way with mindful awareness of your physical and emotional experience – are especially good at reducing traumatic stress. Exercises like walking, running, swimming, or rock-climbing, activate your senses and make you more aware of yourself and others when they are done with focused attention. Get your Zs There is a big difference between the amount of sleep you can get by on and the amount you need to function at your best. Even skimping on a few hours makes a difference! Memory, creativity, problem-solving abilities, and critical thinking skills are all compromised. But sleep is critical to learning and memory in an even more fundamental way. Get on a regular sleep schedule. Go to bed at the same time every night and get up at the same time each morning. Try not to break your routine, even on weekends and holidays. Avoid all screens for at least an hour before bed. The blue light emitted by TVs, tablets, phones, and computers trigger wakefulness and suppress hormones such as melatonin that make you sleepy. Cut back on caffeine. Caffeine affects people differently. Some people are highly sensitive, and even morning coffee may interfere with sleep at night. Relationships stimulate our brains – in fact, interacting with others may be the best kind of brain exercise. Research shows that having meaningful friendships and a strong support system are vital not only to emotional health, but also to brain health. In one recent study from the Harvard School of Public Health, for example, researchers found that people with the most active social lives had the slowest rate of memory decline. There are many ways to start taking advantage of the brain and memory-boosting benefits of socializing. Volunteer , join a club, make it a point to see friends more often, or reach out over the phone. Studies have also linked stress to memory loss. Tips for managing stress Set realistic expectations and be willing to say no! Take breaks throughout the day Express your feelings instead of bottling them up Set a healthy balance between

work and leisure time Focus on one task at a time, rather than trying to multi-task The stress-busting, memory-boosting benefits of meditation The scientific evidence for the mental health benefits of meditation continues to pile up. Studies show that meditation helps improve many different types of conditions, including depression, anxiety, chronic pain, diabetes, and high blood pressure. Meditation also can improve focus, concentration, creativity, memory, and learning and reasoning skills. Brain images show that regular meditators have more activity in the left prefrontal cortex, an area of the brain associated with feelings of joy and equanimity. Meditation also increases the thickness of the cerebral cortex and encourages more connections between brain cells—all of which increases mental sharpness and memory ability. Unlike emotional responses, which are limited to specific areas of the brain, laughter engages multiple regions across the whole brain. Furthermore, listening to jokes and working out punch lines activates areas of the brain vital to learning and creativity. Start with these basics: Share your embarrassing moments. The best way to take ourselves less seriously is to talk about the times when we took ourselves too seriously. When you hear laughter, move toward it. Most of the time, people are very happy to share something funny because it gives them an opportunity to laugh again and feed off the humor you find in it. When you hear laughter, seek it out and try to join in. Spend time with fun, playful people. Their playful point of view and laughter are contagious. Surround yourself with reminders to lighten up. Keep a toy on your desk or in your car. Put up a funny poster in your office. Choose a computer screensaver that makes you laugh. Frame photos of you and your loved ones having fun. Laughter is the Best Medicine: Health Benefits of Humor and Laughter Pay attention to children and emulate them. They are the experts on playing, taking life lightly, and laughing. Eat a brain-boosting diet Just as the body needs fuel, so does the brain. The following nutritional tips will help boost your brainpower and reduce your risk of dementia: Research shows that omega-3 fatty acids are particularly beneficial for brain health. Limit calories and saturated fat. Research shows that diets high in saturated fat from sources such as red meat, whole milk, butter, cheese, cream, and ice cream increase your risk of dementia and impair concentration and memory. Eat more fruit and vegetables. Produce is packed with antioxidants, substances that protect your brain cells from damage. Colorful fruits and vegetables are particularly good antioxidant "superfood" sources. Green tea contains polyphenols, powerful antioxidants that protect against free radicals that can damage brain cells. Among many other benefits, regular consumption of green tea may enhance memory and mental alertness and slow brain aging. Drink wine or grape juice in moderation. Keeping your alcohol consumption in check is key, since alcohol kills brain cells. But in moderation around 1 glass a day for women; 2 for men, alcohol may actually improve memory and cognition. Other resveratrol-packed options include grape juice, cranberry juice, fresh grapes and berries, and peanuts. Identify and treat health problems Do you feel that your memory has taken an unexplainable dip? If so, there may be a health or lifestyle problem to blame. There are many diseases, mental health disorders, and medications that can interfere with memory: Heart disease and its risk factors. Cardiovascular disease and its risk factors, including high cholesterol and high blood pressure, have been linked to mild cognitive impairment. Women going through menopause often experience memory problems when their estrogen dips. In men, low testosterone can cause issues. Thyroid imbalances can also cause forgetfulness, sluggish thinking, or confusion. Many prescription and over-the-counter medications can get in the way of memory and clear thinking. Common culprits include cold and allergy medications, sleep aids, and antidepressants. Talk to your doctor or pharmacist about possible side effects. Emotional difficulties can take just as heavy a toll on the brain as physical problems.

**Chapter 2 : Memory Aids for Dementia - Age Watch**

*The present study represents an attempt to improve verbal orientation and behavioural functioning in a patient with organic dementia, by providing two simple prosthetic aids to memory (watch and diary) and training the patient to use these aids effectively.*

Memory Aids for Dementia Can technology help people with memory problems and their carers? As we get older, we may find ourselves forgetting things more frequently. People living with dementia and their carers know better than anyone how distressing this can be. However there are ways to help people with dementia retain their independence, enabling them to continue to live at home for as long as possible – including assistive technology. Safely carrying out such daily tasks would allow a person with memory problems to retain more of their independence. Automatic calendar clocks- these remind the user of the correct date and time. They differentiate between morning, day and evening to prevent confusion for the person with dementia which is especially useful when it gets dark early in the winter. Medication aids- Dosette boxes are pill holders which have compartments for the day of the week and the time of the day, helping the user to take their medication at the right time. Automatic pill dispensers beep and dispense the pill at the set time for it to be taken. Reminder messages- these are recorded personal voice prompts which can be a familiar voice e. Reminiscence and leisure aids- this refers to digital software such as Book of You , a reminiscence tool created specifically to help those with memory problems and their carers to communicate and interact. Digital software like this enables life stories to be built interactively, using words, pictures, music and film - to help show who a person was and who they are now. They aim to improve the quality of life for dementia sufferers, promoting conversation, recollections of the past, and very importantly, fun. Wristband users may therefore feel confident enough to be unaccompanied when away from home despite their memory problems. There are also sensors, for example: A review found that electronic memory aids which provided verbal instruction produced positive outcomes for people with dementia. And case studies of assistive technology helping people whose dementia was causing different problems were included in a Scandinavian study. However, a review suggested that there were still gaps in provision. For example, it reported few devices available yet to help with behavioural issues like aggression or to support recreational activities. Assistive technology for carers: Assistive technology can help carers to ensure that they do not become overwhelmed with the task of caring for their loved one. Where can I get hold of memory aids? Health or social services may provide funding in some cases for purchasing equipment such as assistive technology memory aids. To find out more contact your local community mental health team where a social worker, occupational therapist or dementia advisor can make an assessment of your eligibility and advise you on what is available. Where funding is not available, memory aids may be purchased or hired privately from local shops, pharmacies, online services or superstores. Things to consider when buying: Ask for the memory aid to be demonstrated before purchasing. Is it easy to use? Check things like battery life, and whether the memory aid will need servicing regularly. Ask how safe the device is. Do you need this memory aid for long or short-term usage? Consider hiring instead of purchasing for short-term usage if this would save money. Aids which may work for one person with dementia may not work for another. Remember to keep the use of aids person-centred. Tailor it to the needs and interests of the specific person with dementia rather than taking a one size fits all approach. Involving the person with dementia in the decisions about which memory aids to use can help with this. Technological aids are effective when used as a complementary tool alongside good care, not as a replacement for good person-centred care. Memory aids which can be easily integrated into the routine of the person with dementia will cause least disruption and therefore may work best. Start using memory aids as early as possible as they work best during the early stages of dementia. Some people with dementia may prefer not to use memory aids, as they may view them as constant reminders of their memory problems. Only use memory aids with the consent of the person with dementia, where possible.

## Chapter 3 : Memory aids in the home and dementia | healthdirect

*Use the ingenious communication and memory aids featured in this practical guide to significantly improve the ability of people with dementia and related memory impairments to stay connected, engaged, and functioning at their optimal level of independence.*

Keeping your brain alert and active is a good thing but, on its own, may not necessarily improve memory. Consultant neuropsychologist, Dr Sallie Baxendale, attended our annual conference to give a presentation on coping with memory problems for people with epilepsy. Watch her presentation below: Video of Coping with memory problems. Memory aids may help you to cope with memory problems. Different aids or reminders may suit different types of memory problems and they work best if they are used regularly as part of a routine. Here are some ideas. For example, sticking a note to the front door to remind you to pick up your keys before you go out. Calendars Using a calendar can be helpful, particularly if it is placed somewhere you will see it easily and often, such as on the fridge door. Keeping more detailed notes in a diary may be helpful to keep track of people you have met, where you have been and what you did. A diary can also be a handy way of recording seizures. Drug wallets pill boxes Drug wallets can help to remind you to take your medication and how many tablets to take. They usually have seven small containers to keep medication in, one for each day of the week. Each container is divided into sections, for the morning, afternoon and evening, and can be removed if you are going out and want to take your medication with you. Some have an alarm to remind you when to take your medication. Drug wallets can also be used to check if you have taken your medication to avoid taking it twice by mistake. For example, reminding you to take your medication or feed a pet. Many mobile phones also have a reminder function. With this you can write a message and set a date and a time for the phone to send the message to you or to set an alarm. Smartphones can access the internet to download software applications apps which add functions to your phone. There are many apps available, including memory aids. Other memory techniques Some memory techniques can help the brain to store and find information. They often need practice and may not be suitable for everyone. These techniques often use rhymes, stories or images to help you to link ideas to make a stronger memory. Here are a few ideas for dealing with some common memory problems. If this does not work, try using a different word. They may try to help by suggesting another word. The following techniques might also help: When you meet someone for the first time concentrate on their name, repeat it to yourself and use it while you talk to them. Imagine a picture of the person that has something to do with their name. For example, Mr Bridge sitting on a famous bridge. Use a rhyme, for example Joan always moans or Mr Shah drives a sports car. Physical features can help you to remember names, for example you could imagine Mr Pearman as a pear. It may be helpful to write the name down and try to think of a way to remember it later. Writing down what you have done, in a diary or other place which you look at regularly, may also help Going over in your mind what you were doing the last time you had the missing item is another technique. Physically going back to where you were at the time can also help. It can be helpful to have a filing system, a standard routine, or places to keep things, such as keeping your keys in the same place. Using the first letter of each word in a sentence can help you to remember a list. Using pictures or mind mapping Drawing a picture that represents what you are reading or revising may help you to recall the information. Here is an example. Preparing for exams These ideas may help you revise for exams: Linking what you are reading to a personal experience, or something you already know, may help you to store the information. Test yourself before the exam. Past papers or revision guides can help. Brain training This involves doing computer-based mental exercises. Although some people find these exercises challenging and fun, independent research has shown that brain training does not improve memory performance in daily life. Further information Taken from our Memory leaflet.

### Chapter 4 : External Aids for Memory and Other Cognitive Deficits Associ by Wendy Huang on Prezi

*Look for aids and tools that fit with the skills you have. For example, if you have never used a mobile phone with a calendar, you may find it difficult to start using one now. Easy-to-use mobile phones - which can only be used for calls and nothing else - are available.*

This means that the transitional period after hiring is vital for retaining new employees. Improving the new employee orientation experience could save your company thousands of dollars and countless hours of time. Here are five ways to integrate your next hire better, and save your company time and money by improving your hiring process. Make a solid plan ahead of time for new employee orientation. Some people recommend coming up with an extensive planning schedule for new employee orientation: Your plan will depend on your industry, so do your homework, put a plan in place, and then redo the plan as necessary. That way, once you have a few new recruits on board, you can always improve your processes. Make a game plan for team building. This means that their hiring manager, department manager, and colleagues should have a least one personal conversation to get to know their new team member. The only way all those people involved in the process is if you emphasize the importance of relationship in the new employee orientation process. Communicate clearly about the job and the company. Communicate clearly about the company as a whole—with all its goals and missions. Share the company culture and values with them. Ensure relational connections and opportunities with their new colleagues. You must communicate clearly with all levels of your org chart. Communicate up to your superiors, down to entry level positions, and across to your department heads about the orientee. The responsibility of clear communication is yours — no more excuses if you want to get it done. If you are onboarding the new employee, then you must ensure that all company goals are communicated clearly. Good communication involves listening too, so make sure to discuss the career goals and aspirations of your employee, because that helps the onboarding process. With regard to your own career planning, if you learn to listen part of good communication, you will retain employees better too and become a better manager! Take time to teach the skills necessary for the job. Even if the orientee is not an experienced worker, you need to clearly teach how they fit within their new role. Keep new employees with solid training. Offer specific expectations and encouragement early on. Everyone needs personal encouragement, and this is especially important in the new employee orientation process. We love what Jeff Haden of Inc. After a certain number of days say days, then give them specific feedback on their job performance. This could save your new employee from running away after a short period of time on the job. Saving resources through the orientation process Your challenge is to bring new employees onboard with no extra expenses and no wasted time. But if you have a good plan, implement your strategy, and maintain consistency throughout this transitional time, you will carry your new employees across the threshold of hiring and save time, money, and headaches along the way. Using a crowdsourced hiring company like Relode can help you find the best employees for your company. Schedule a demo today and learn how Relode can save you time and money!

**Chapter 5 : The Best Study Skills - Five Strategies Every Student Should Know**

*The memory process. Memory is a highly complex process involving multiple components working simultaneously. Our description of isolated components is only a representation because in reality our brains process information in an integrated fashion.*

People who are tense and under stress are prone to memory lapses

**T** Translate the information or ideas into your own words

**S** Rushing or being impulsive reduces attention to the information or task

**R** Rehearse the information immediately and relate the new to the old ideas

**O** Organize the information or organize locations; keep important items in a designated place

**A** A picture is worth words; visualize the information

**W** A small notebook, calendar, tape recorder or PDA can be very useful

**P** The more information is practiced, the better will be the recall

**V** Visualize Associate an image with the information to recall

Select the strategy you feel is appropriate for your students. Teach each step, one at a time. Be sure they understand each step and its meaning before moving on to the next. Then show the steps in sequence and explain how to use the mnemonic or keyword to help recall the steps. Provide each student with time to process and consolidate one thing before moving on. Several years ago, a FarSide cartoon was published showing a classroom situation. The student raised his hand and asked to be excused because his "brain was full. Too many strategies at once may confuse the student rather than help. He is also tossing the ball with each item. Repetition and rehearsal of information enhance a process called consolidation, the process by which memories are moved from temporary storage in the hippocampus a small structure within the brain to more permanent storage in the cortex the outer layer of the brain Richards, , p. Multiple repetitions of the information provides rehearsal, but doing so may bore students. When bored, the brain can go into a pattern similar to the "screen saver" mode on your computer monitor. The student may not pay attention to what he is repeating. Therefore, using strategies with humor, movement, songs, and other forms of novelty are critical in enhancing the value of the repetition. As an example, consider the task of learning five state capitals. Following are several different activities to use in memorizing the associations. Practice saying the capital and the state together, as in "Sacramento, California; Columbus, Ohio" etc. This helps create the association between the two words. Develop silly mnemonics to help remember which capital goes with the state. For Ohio, sketch a picture of a person saying, "oh, hi, oh Columbus. Perform a motor activity such as jumping on a small trampoline or playing catch while saying the city in response to hearing the state, or vice versa see figure 2. Create a rap or jingle that repeats each state and its capital.

**Back to top Imagery:** When thinking about imagery, most people think of the visual image. However, images can also be a motor image, sometimes called "muscle memory," or an auditory image.

**Visual images** A visual picture can cue a strategy or represent a concept. For example, suppose your student needs to remember that our First Amendment rights are free speech, religion, the press, and the right of assembly. Since it is the First Amendment and one rhymes with sun, use a sun as a visual cue. Draw a happy sun with legs and arms, singing. Place the word RAPS in a talk bubble, as shown in figure 3. There are many different types of visual organizers. Lines extend, with each representing a major concept. The representations may use pictures, icons, or keywords. The example organizer below was developed in preplanning a paragraph on dogs Richards, , p. They can emphasize cause-and-effect, the sequence of an event or episode, or create a summary of what was read. Visual organizers are also useful in planning for a paragraph or report and in studying for a test. Categorization is a critical skill for students because it forms the basis for critical thinking and inferential comprehension when reading. A Venn diagram is a valuable organizer that visually emphasizes comparisons and contrasts. A Venn diagram comparing characteristics of mammals and reptiles was presented in the article The Writing Road. Other uses for Venn diagrams include comparing two characters in a story or two different events in history. Two overlapping circles are drawn and characteristics of one item or event are listed in the left side of the circle if they differ from the other item. The characteristics of the second item are listed in the right side of the circle if they differ from the first item. Characteristics that are common to both items are placed in the middle. Figure five shows an example of a Venn diagram that comparing and contrasting volcanoes to revolutions. This information was assembled by having students brainstorm what

they knew about each item. Initially, it may appear that the concepts of a volcano and a revolution are different. Actually, there are many similarities. Suppose your student has studied volcanoes and understands the characteristics. She may then compare this knowledge to characteristics of a revolution. Doing so forms a pattern comparing new ideas to ideas already learned. Thus, your student elaborates her understanding of each concept as she connects knowledge about volcanoes to another eruption, a revolution Richards, , p. To understand a motor image, think about struggling to remember a phone number. You may move your fingers in the pattern of the phone number as if dialing it and find that this helps you recall the number. Repetition and practice trigger neurons brain cells. When a set of neurons fire together, they develop a "habit" of firing together again. Habits as well as academic learning occur this way. Use multisensory strategies so your child simultaneously sees, hears, and touches or moves with the information. Did you ride a bicycle when younger? Did you learn to ride your bicycle by reading a book about it? No, you needed to actually practice riding. With enough repetition, you retained a motor image of the procedure. Would you be able to now get on a bicycle and ride with relative ease? Most people will answer yes to this question. Our muscles remember information or procedures that were practiced many times. Muscle memory is a powerful learning tool! As an example, students may use motor images of the direction of the letters b and d by using a hand pattern or "Fonzie fists" named after the character Fonzie in "Happy Days". Have your child hold his hands facing his body and make a fist with each thumb sticking straight up figure 6. The left-hand is similar to a b and the right hand is similar to d. Your child can recall the sequence by saying the alphabet "a, b, c, d" Richards, , p. Air writing figure 7 involves writing the letters in the air creating a motor image while also imagining seeing the letters creating a visual image. The student should simultaneously say the letter as she writes it in the air creating an auditory image. In fisting, the student taps each syllable of the word to be spelled using the side of her fists. She then spells the word syllable by syllable, this time tapping their fist to each sound within the syllable as she spells it. In arm tapping, the student follows the same procedure of first identifying each syllable and then identifying every sound within each syllable. This time the student uses two fingers of one hand to tap on the forearm of the other hand. These simple strategies involve muscle memory while also helping the student proceed systematically. These two aspects create a very powerful memory enhancer. Many math strategies for finger calculation, especially multiplication, take advantage of motor images or muscle memory. Playful Strategies for All Students Richards, , pp. Back to top Patterns: As we receive information from our senses, we need prior knowledge and a system for organizing the information so we may assign meaning to it. When information comes in, our brain searches around for existing knowledge. This is referred to as pattern recognition and is of tremendous value in enhancing memory. Since our "thinking cap" is strongly influenced by patterns, not facts, remembering information is maximized when it is provided in contextual, event-oriented situations which include motor learning, location changes, music, rhythm, and novelty. We do poorly when we "piecemeal" learning into linear, sequential facts and other out-of-context information lists". Eric Jensen, Super Teaching, p. Additionally, the use of music and rhyming creates a pattern or organization for the information. Using music to review concepts can be very powerful. Music also supports relaxation, creativity, and motivation. Students can create their own songs or raps, or they may use existing songs to review concepts and facts. It is also fun to change the words to a common song. In the example below, the tune of "Row, Row, Row Your Boat" is used to sing about the importance of paying attention to a period at the end of a sentence Richards, , p. Stop, stop, stop the words With a little dot. Humor and silliness are valuable to use along with other strategies because our brains prefer to remember unusual information. A short sentence or a sequence of letters can be used to aid in the memory, with or without pictures or actual items. Remember, it is critical that your student understands and knows the information prior to using these mnemonics, the purpose of which is to serve as a trigger to bring up information. Following are examples of useful mnemonics. The mnemonic The first letter of each word helps recall: Biv The colors of the rainbow in order:

### Chapter 6 : Making It Stick: Memorable Strategies to Enhance Learning | LD Topics | LD OnLine

*External Aids for Memory and Other Cognitive Deficits Associated with TBI Study found that Google Calendar was more beneficial as an external aid than using a diary system with pencil and paper. This system was particularly effective because of the ease with which reminders can be programmed to stimulate prospective memory.*

Objects are generally composed of several different features, including: For example, many objects on a desk like a computer mouse, mobile phone, and pen, could be coloured black or white and shaped as a rectangle or oval. Feature binding is a process by which our brain combines all of the specific features of an object and gives us a complete picture of it. Binding is necessary when trying to find an object with specific features. However, this attentional process is impaired in AD patients. Even when they successfully find such items they cannot remember them well, and so it would benefit AD patients if the objects in their surroundings were distinguishable by a single, prominent feature, such as colour. If the objects all appeared in different colours, the attentional cost of finding them in a cluttered scene would be significantly reduced. Think of how hard it is to find Waldo! Since visual search is likely to be facilitated by visual short term memory short-term memory limited to information in the visual domain , patients with AD would be better able to maintain their search target in memory, and therefore find the target sooner. This is supported by recent research which has shown that reducing visual clutter helps to improve perception. How can this knowledge be used to help AD patients? Simple signs may be positioned around the home, reminding them of where rooms are located for example. A recent study has shown that cognitive performance can be aided by an improved visual environment. In this study which monitored the performance of those suffering AD versus that of healthy individuals in bingo. It is clear from this study that having an improved visual environment aids AD patients. Visual aids are also commonly used in presentations as a method of increasing retention of information and increasing engagement with the information presented. This idea is the same as using signage or visual aids in the home of an AD sufferer to improve their visual memory, so as to allow them to complete the task at hand. This could be it finding the correct medication or in more severe cases finding the bathroom for example. Visual aids also help to reduce stress and frustration, which can be associated with AD patients losing their orientation or not being able to perform a task due to forgetting what specifically they were trying to accomplish. By utilising visual aids, this psychological distress can be reduced giving the patients a greater sense of control. Our products also aim at giving patients a greater degree of independence in daily living by maintaining or improving understanding of their environment and orientation as well. Let us know if this article has helped!

## Chapter 7 : Memory, Mnemonics and Mnemonic Techniques from [www.nxgvision.com](http://www.nxgvision.com)

*Therefore, while it would not be expected that external memory aids would actually improve memory; there is evidence that their use is effective in assisting patients to complete everyday, complex activities as indicated in functional, patient-centered outcomes.*

The tools in this section help you to improve your memory. They help you both to remember facts accurately and to remember the structure of information. The tools are split into two sections. As with other mind tools, the more practice you give yourself with these techniques, the more effectively you will use them. This section contains many of the memory techniques used by stage memory performers. With enough practice and effort, you may be able to have a memory as good. Even if you do not have the time needed to develop this quality of memory, many of the techniques here are useful in everyday life. Mnemonics "Mnemonic" is another word for memory tool. Mnemonics are techniques for remembering information that is otherwise quite difficult to recall: The idea behind using mnemonics is to encode difficult-to-remember information in a way that is much easier to remember. Finding This Article Useful? Read our Privacy Policy Our brains evolved to code and interpret complex stimuli such as images, colors, structures, sounds, smells, tastes, touch, positions, emotions and language. We use these to make sophisticated models of the world we live in. Our memories store all of these very effectively. Unfortunately, a lot of the information we have to remember in modern life is presented differently – as words printed on a page. While writing is a rich and sophisticated medium for conveying complex arguments, our brains do not easily encode written information, making it difficult to remember. This section of Mind Tools shows you how to use all the memory resources available to you to remember information in a highly efficient way. Using Your Whole Mind to Remember The key idea is that by coding information using vivid mental images, you can reliably code both information and the structure of information. And because the images are vivid, they are easy to recall when you need them. The techniques explained later on in this section show you how to code information vividly, using stories, strong mental images, familiar journeys, and so on. You can do the following things to make your mnemonics more memorable: Use positive, pleasant images. Your brain often blocks out unpleasant ones. Use vivid, colorful, sense-laden images – these are easier to remember than drab ones. Use all your senses to code information or dress up an image. Remember that your mnemonic can contain sounds, smells, tastes, touch, movements and feelings as well as pictures. Give your image three dimensions, movement and space to make it more vivid. You can use movement either to maintain the flow of association, or to help you to remember actions. Exaggerate the size of important parts of the image. Funny or peculiar things are easier to remember than normal ones. Similarly, rude rhymes are very difficult to forget! Symbols red traffic lights, pointing fingers, road signs, etc. Imagination, Association and Location The three fundamental principles underlying the use of mnemonics are imagination, association and location. Working together, you can use these principles to generate powerful mnemonic systems. Your imagination is what you use to create mnemonics that are potent for you. The more strongly you imagine and visualize a situation, the more effectively it will stick in your mind for later recall. The imagery you use in your mnemonics can be as violent, vivid, or sensual as you like, as long as it helps you to remember. You can create associations by: Placing things on top of each other. Wrapping them around each other. Rotating them around each other or having them dancing together. Linking them using the same color, smell, shape, or feeling. As an example, you might link the number 1 with a goldfish by visualizing a 1-shaped spear being used to spear it. By setting one mnemonic in a particular town, I can separate it from a similar mnemonic set in a city. For example, by setting one in Wimbledon and another similar mnemonic with images of Manhattan, we can separate them with no danger of confusion. You can build the flavors and atmosphere of these places into your mnemonics to strengthen the feeling of location. Subscribe to our free newsletter , or join the Mind Tools Club and really supercharge your career!

**Chapter 8 : How to Improve Your Memory: Tips and Exercises to Sharpen Your Mind and Boost Brainpower**

*Beyond Memory Books: Maintaining function in dementia with written cues Disease using a prosthetic memory aid. to enhance use of external aids by persons with.*

Chapter 15 Presentation Aids: When you give a speech, you are presenting much more than just a collection of words and ideas. In some speaking situations, the speaker appeals only to the sense of hearing, more or less ignoring the other senses except to avoid visual distractions by dressing and presenting himself or herself in an appropriate manner. But the speaking event can be greatly enriched by appeals to the other senses. This is the role of presentation aids. Presentation aids The resources beyond the speech itself that a speaker uses to enhance the message conveyed to the audience. The type of presentation aids that speakers most typically make use of are visual aids: Audible aids include musical excerpts, audio speech excerpts, and sound effects. A speaker may also use fragrance samples or a food samples as olfactory or gustatory aids. Finally, presentation aids can be three-dimensional objects, animals, and people; they can unfold over a period of time, as in the case of a how-to demonstration. As you can see, the range of possible presentation aids is almost infinite. However, all presentation aids have one thing in common: To be effective, each presentation aid a speaker uses must be a direct, uncluttered example of a specific element of the speech. The key is that each presentation aid must directly express an idea in your speech. Moreover, presentation aids must be used at the time when you are presenting the specific ideas related to the aid. Presentation aids must also be easy to use. At a conference on organic farming, your author watched as the facilitator opened the orientation session by creating a conceptual map of our concerns, using a large newsprint pad on an easel. In his shirt pocket were wide-tipped felt markers in several colors. When he bent over to pick up the cap, all the other markers fell out of his pocket. They rolled about too, and when he tried to retrieve them, he bumped the easel, leading the easel and newsprint pad to tumble over on top of him. The audience responded with amusement and thundering applause, but the serious tone of his speech was ruined. The next two days of the conference were punctuated with allusions to the unforgettable orientation speech. This is not how you will want your speech to be remembered. To be effective, presentation aids must also be easy for the listeners to see and understand. In this chapter, we will present some principles and strategies to help you incorporate hardworking, effective presentation aids into your speech. We will begin by discussing the functions that good presentation aids fulfill. Next, we will explore some of the many types of presentation aids and how best to design and utilize them. We will also describe various media that can be used for presentation aids. We will conclude with tips for successful preparation and use of presentation aids in a speech. Explain two ways in which presentation aids can increase audience understanding of a message. Why should you use presentation aids? While it is true that impressive presentation aids will not rescue a poor speech, it is also important to recognize that a good speech can often be made even better by the strategic use of presentation aids. Presentation aids can fulfill several functions: Improving Audience Understanding Human communication is a complex process that often leads to misunderstandings. If you are like most people, you can easily remember incidents when you misunderstood a message or when someone else misunderstood what you said to them. Misunderstandings happen in public speaking just as they do in everyday conversations. One reason for misunderstandings is the fact that perception and interpretation are highly complex individual processes. Most of us have seen the image in which, depending on your perception, you see either the outline of a vase or the facial profiles of two people facing each other. This shows how interpretations can differ, and it means that your presentations must be based on careful thought and preparation to maximize the likelihood that your listeners will understand your presentations as you intend them to. As a speaker, one of your basic goals is to help your audience understand your message. To reduce misunderstanding, presentation aids can be used to clarify or to emphasize. Clarifying Clarification is important in a speech because if some of the information you convey is unclear, your listeners will come away puzzled or possibly even misled. Presentation aids can help clarify To make clear so that the audience understands your meanings the way you intend. If your speech is about the impact of the Coriolis effect on tropical storms, for instance, you will have great difficulty clarifying it without

a diagram because the process is a complex one. The diagram in Figure 1 allows the audience to process the information in two ways: In this image you clearly have a speaker and an audience albeit slightly abstract, with the labels of source, channel, message, receivers, and feedback to illustrate the basic linear model of human communication. Instead, showing an example of a petroglyph, as in Figure 2, emphasizing the scarcity of useful water and thus draws attention to this important information in your speech. Image courtesy of Wikimedia, [http://commons.wikimedia.org/wiki/File:Water\\_conservation\\_diagram.png](http://commons.wikimedia.org/wiki/File:Water_conservation_diagram.png)

When you use a presentational aid for emphasis To impress the importance or to repeat the verbal message in visual form. In a speech on water conservation, you might try to show the environmental proportions of the resource. When you use a conceptual drawing like the one in Figure 3 This drawing is effective because it emphasizes the scarcity of useful water and thus draws attention to this important information in your speech. Image courtesy of Wikimedia, [http://commons.wikimedia.org/wiki/File:Water\\_conservation\\_diagram.png](http://commons.wikimedia.org/wiki/File:Water_conservation_diagram.png)

Another way of emphasizing that can be done visually is to zoom in on a specific aspect of interest within your speech. On the left side of the visual aid, we see how the characters all fit together, with an emphasized version of a single character on the right. A article by the US Department of Labor summarized research on how people learn and remember. Presenting effective presentations with visual aids. The article goes on to note that information stored in long-term memory is also affected by how we originally learn the material. In a study of memory, learners were asked to recall information after a three day period. The researchers found that they retained 10 percent of what they heard from an oral presentation, 35 percent from a visual presentation, and 65 percent from a visual and oral presentation. Learning in fourth and sixth graders as a function of sensory mode of stimulus presentation and overt or covert practice. *Journal of Educational Psychology*, 52 5, 467-474

For this reason, exposure to a visual image can serve as a memory aid to your listeners. When your graphic images deliver information effectively and when your listeners understand them clearly, audience members are likely to remember your message long after your speech is over. Moreover, people often are able to remember information that is presented in sequential steps more easily than if that information is presented in an unorganized pattern. When you use a presentation aid to display the organization of your speech, you will help your listeners to observe, follow, and remember the sequence of information you conveyed to them. This is why some instructors display a lecture outline for their students to follow during class. An added plus of using presentation aids is that they can boost your memory while you are speaking. Using your presentation aids while you rehearse your speech will familiarize you with the association between a given place in your speech and the presentation aid that accompanies that material. For example, if you are giving an informative speech about diamonds, you might plan to display a sequence of slides illustrating the most popular diamond shapes: As you finish describing one shape and advance to the next slide, seeing the next diamond shape will help you remember the information about it that you are going to deliver. Adding Variety and Interest A third function of presentation aids is simply to make your speech more interesting. While it is true that a good speech and a well-rehearsed delivery will already include variety in several aspects of the presentation, in many cases, a speech can be made even more interesting by the use of well-chosen presentation aids. For example, you may have prepared a very good speech to inform a group of gardeners about several new varieties of roses suitable for growing in your local area. You can imagine that your audience would be even more enthralled if you had the ability to display an actual flower of each variety in a bud vase. Similarly, if you were speaking to a group of gourmet cooks about Indian spices, you might want to provide tiny samples of spices that they could smell and taste during your speech. Taste researcher Linda Bartoshuk has given presentations in which audience members receive small pieces of fruit and are asked to taste them at certain points during the speech. *Association for Psychological Science*. Miracle fruit and flavor: An experiment performed at APS [Video file]. As we mentioned earlier, impressive presentation aids will not rescue a poor speech. However, even if you give a good speech, you run the risk of appearing unprofessional if your presentation aids are poorly executed. This means that in addition to containing important information, your presentation aids must be clear, clean, uncluttered, organized, and large enough for the audience to see and interpret correctly. Misspellings and poorly designed presentation aids can damage your credibility as a speaker. Conversely, a high quality presentation will contribute to your professional image. In addition, make sure that you give proper credit to the source of any presentation aids that you take from other sources. Using a statistical chart or a map without proper credit will detract from your credibility, just as using a quotation in your speech without credit would. If you focus your efforts on producing

presentation aids that contribute effectively to your meaning, that look professional, and that are handled well, your audience will most likely appreciate your efforts and pay close attention to your message. That attention will help them learn or understand your topic in a new way and will thus help the audience see you as a knowledgeable, competent, credible speaker. There are four basic reasons to use presentation aids. Third, they make a speech more interesting by adding variety. Presentation aids can help the audience to understand complex ideas or processes and can also show which ideas are most important in the speech. Exercises Look at the outline you have prepared for a classroom speech. Where in the speech would it be appropriate to use presentation aids? Why would presentation aids help at the points you identify? Presentational slides from speeches are sometimes available online. Search for and evaluate three sets of presentation slides you find online. Identify three ways that the slides could be improved to be more effective presentation aids. Explain the importance of using graphs while speaking.

**Chapter 9 : Memory aids, reminders and brain training | Epilepsy Society**

*Introduction. Training programs designed to enhance memory among older adults have proliferated in recent years. Memory training programs exist within the larger context of cognitive training, which is based on the notion that cognition is plastic in older age (Acevedo & Lowenstein, ; Rebok, Carlson, & Langbaum, ).*

However, these sources often gloss over certain memory-related habits that can really help you remember the material much better. On this page I describe five proven study strategies that every student should know and use to maximize their retention of the material. Much of my understanding of the best study skills comes from the book *Your Memory*: Higbee, the study skills you should be using are: Higbee refers to these as "strategies for effective learning". In addition to learning about Dr. These techniques work hand in hand. Higbee describes can help improve your understanding and memory regardless of material. The methods are effective for gradeschool, college, online courses , independent study, or any other learning environment. Make these five best study skills a part of every study session, and you should be able to recall the information much more easily. And if you find it hard to motivate yourself to actually sit down and study, check out my tips on how to beat procrastination. If you have trouble staying focused while studying, consider listening to these music genres during your study sessions.

**Best Study Skills 1: Reduce Interference** One cause of forgetting is something called "interference". Interference occurs when information you have learned previously interferes with gets in the way of new material that is similar. Interference may cause confusion when the time comes to recall the material. The brain can mix up new information with what was learned before. For example, suppose you met several people at a business conference last week. Then, you met several more people at a party last night. Interference may cause you to confuse the names of people at the conference with those you met at the party and vice versa. There are several individual strategies you can employ to keep interference to a minimum: The better you know the material, the less likely that interference will occur. To overlearn, continue studying past the point where you can just barely recall the information. President Abraham Lincoln in Rather than stopping after you are able to remember the speech just once without mistakes, continue studying it further to achieve better mastery. Research shows that overlearning strengthens memory for any material, and one of the ways it does this is by reducing possible interference. Another way to reduce interference is to make the information more meaningful. To best remember what you are learning, the material needs to make sense rather than just be learned by rote. Interference can still happen even with meaningful material, but it will occur less often. Some ways you can make what you are learning more meaningful include: The more you know about a subject the easier it is to learn new material related to it. For example, experienced chess players are able to memorize new moves more quickly than other people who are not familiar with chess. To my way of thinking, the principle of familiarity is one of the many benefits of being a life-long learner interested in a wide range of subjects. Something you learn today may help you learn related material some time in the future. If you can convert the information you want to remember into a rhyme, it will be more meaningful and therefore easier to remember. You have probably heard such mnemonic rhymes as "In fourteen hundred and ninety-two, Columbus sailed the ocean blue," or "I before E, except after C. In the same way that rhymes make information more meaningful, patterns do the same. Look for patterns in any material you want to learn. For example, when learning a list of codes , identify repeating patterns or rules that can help you quickly memorize subsections of the list. When memorizing phone numbers or other long numbers, break the numbers of into memorable patterns if possible. If you need remember the number , it helps to notice that every fourth number is a "3", as in Even in the absence of patterns, the direct chunking of long numbers into a series of shorter numbers aids memory. Interference increases as the amount of activity between study time and the time to recall the material increases. A lot of intervening mental activity especially increases the chances of interference. If you have an exam coming up, the best way to minimize interference is to go to sleep assuming you have studied sufficiently. But it is good to keep in mind nevertheless; use it when you can. Forgetting due to interference will also increase if you try to study similar subject close together. For example, suppose you need to study biochemistry, organic chemistry, and trigonometry during the next few

days. Since biochemistry and organic chemistry are somewhat similar, it would be better to study trigonometry between them to lessen possible interference. Study Different Subjects in Different Rooms. Another proven way to reduce interference is to study in different contexts for different subjects that might interfere with one another. To prevent confusion between these two similar languages, study French in one room and Spanish in a different room. Even using different colored inks for the two subjects when taking notes can help reduce interference. When using image-based techniques to memorize similar material, create separate mental "rooms" by including a subject-anchor in your images. For instance, integrate the Eiffel Tower into your French images and a sombrero into your Spanish images. Use Separate Study Sessions. Avoid studying all your subjects at the same time. Research shows that there is better remembering and less interference if only one subject is learned during a particular study session. Instead, spend sufficient time with one subject, then study the others in separate study sessions. For instance, after studying Math, get up and take a break before starting English. Get a snack or drink of water to help re-set your brain in preparation for the next subject to be studied. Best Study Skills 2: Space It Out The second of the best study skills recommended by Dr. Higbee is to space out the studying for any particular subject. In other words, for best remembering it would be better to study your Math chapter in three 1-hour sessions than in a long 3-hour session. As every student knows, trying to learn all the material in one study session is called "cramming". While cramming might get you through the test the next day or not, research shows it is a very poor way to actually learn. In the same way that breaking up the material of several different subjects into multiple, separate study sessions enhances memory for the material, breaking up the study of a single subject does the same. However, to do this successfully requires that you budget your time. Many students fail to plan ahead in their studying, and they pay for this with poorer learning and academic performance than they are capable of. If you want an advantage over your classmates, start studying ahead of time, and separate your studies for each subject into more than one session. There are at least three reasons why this spaced learning is better than cramming: The Limits of Attention. Quite simply, there is a limit to how long you can focus on a given set of material. If you try to learn too much at once, your ability to concentrate on the material as you are learning suffers. Lack of concentration and attention leads to poor recollection of the material. Research suggests that your brain strengthens memories during breaks. When you try to cram everything at once, there are no significant breaks, and less consolidation of memories occurs. Memory is aided by environmental context. In other words, the room you study in, the type of pen or pencil you use when studying, or even your mood can link what you learned during studying with what you can recall of the material during testing. Therefore, the more study sessions you have for one subject, the better the chance that your mood or some other factor will match the environment during your test time. And this can subconsciously aid memory. Due to these three factors, the actual time required to master the material when you space out your learning is less than when cramming. However, there is a limit to the benefit of spacing. Dividing 3 hours into 18 ten-minute study sessions is not likely to be efficient. As a rule of thumb, set shorter periods for harder subjects and longer periods for easier subjects. Also, the more mature you are or the more advanced with the subject, the longer you can probably study per session. Best Study Skills 3: Use Whole and Part Learning The third of the best study skills is knowing when to break up the material. For example, if you need to study and remember a long chapter in your history book, should you try to learn everything in the chapter straight through, or study the individual chapter sections carefully one by one? The best approach is often a combination of the two. Some options you have include: Whole Method with Extra Studying for Parts. With this approach, you first use the whole method to get a good grasp of the material. In other words, read straight through everything carefully once or twice. Then you separate out the more difficult sections for extra study and reinforcement. First go straight through all the material a couple of times quickly. Then break up the material into logical parts that you study separately. At the end, go back and review everything from beginning to end.