## SEMINAR HANDOUT ON

# INCREASE YOUR MEMORY POWER 

## PRESENTED BY

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# Take Control of Your Life by Increasing Your Memory Power 

## 1. Introduction

No one has a poor memory. The vast majority have an untrained memory. Some have trained their memories to be better than others. A leading brain researcher writing in a scientific journal wrote, "If we start recollecting from memory our past experiences, and write all that comes into our conscious mind, we will be writing for the rest of our life - working 24 hours of the day." That's how good our memory is. Memory is central to human existence, and effective memory is of incalculable value.

## 2. Permanent Or Non-permanent Memory

Dr. Wilfred Penfield of the Montreal Neurological Institute said, "The question is not whether the information is there or not in our memory but whether we can recall the information?. The information is there. We have to train our memory to recall the information."

What is the justification for the permanent storage of information in our memory? People under hypnosis are able to recall experiences that happened many years before in their lives. Similarly, in criminal investigations, hypnotists have been able to get people, under hypnosis, to recall vital information, such as license number plates.

The belief that everything we hear or experience is stored permanently is being challenged seriously by modern research. New studies suggest that our memory is continuously being altered, reshaped and transformed. As we recall an experience from memory, using our creative imagination we tend to add some information - information that was not there in the first place.

When a memory of an event is called into the conscious mind, the possibility exists for its alteration. Memory seems not to be permanent. Rather, we have a mechanism within our brain for updating memory that sometimes leaves the original memory intact and sometimes not.

Dr. Penfield based his conclusions that memory of past experiences is permanent, on the flashback responses he received from patients, whose brains were stimulated using electrodes. The question is whether these flashbacks are real experiences or fantasies of the memory? The possibility exists that the patient is not reliving his or her past experience but creating new experiences through fabrication - not intentionally but truthfully believing that they are real, past experiences.

We have presented here arguments for the permanent nature of memory and arguments refuting such claim. There is no definite support for either hypothesis. On the other hand, there is absolutely no doubt that we are using only a small percentage of our brain potential as suggested, without exception, by all brain researchers.

## 3. Purpose Of Effective Memory

EFFECTIVE MEMORY IS TO LEARN FASTER AND RETAIN THE RELEVENT INFORMATION.

EFFECTIVE MEMORY IS NOT NECESSARILY TO RECALL FACTUAL DATA BUT TO SEE RELATIONSHIP BETWEEN NEW AND OLD INFORMATION.

## 4. Brief History Of Memory Systems

Memory systems date back to antiquity. The Greek orators used the different items in the rooms of their homes to hang the different thoughts of their speeches.

During the middle ages, the writers and monks were virtually the only people who trained their memory using different memory systems. The book, - " Phoenix" by Peter of Ravenna in 1491 popularized the concept of trained memory and brought the art of memory training out into the world of lay people. The monarchy of Europe during the renaissance period used memory systems. Shakespeare's Globe theater was sometimes referred to as the memory theater. Francis Bacon in his book, 'The Advancement of Learning' writes about remembering, and memory systems. Some insist, that the great mathematician Leibnitz, inadvertently stumbled on calculus while searching for a memory system to aid in the remembering of numbers. The other best known memory book, from the past, is titled "Memory" by William Stokes published in the 1800s.

German psychologist Prof. Hermann Ebbinghaus initiated the scientific study of memory. He was one of the pioneers of experimental psychology. He published, "About Memory" in 1885, which created a tremendous interest in the study of remembering.

## 5. Types Of Methods For Effective Use Of Memory

Modern day brain researchers have established that, broadly speaking, there are three different methods for improving human memory. They are:

1. Natural Method:
2. Mechanical Method: Repetition or rote technique
3. Artificial Method: Various memory techniques

Many who seem to naturally have effective memories have been found to follow the principles of remembering either intentionally or accidentally. In order to develop an effective memory, we must learn the principles and apply the rules and techniques until they become habits as natural as blinking of the eye lids.

## Natural Method:

Randomly stored important information make most people ineffective in their daily lives. What we need is not a better memory but a better management of the one we have. Scientific studies clearly point to natural ways for effective remembering being far superior to artificial methods.

The memory techniques presented, under the artificial methods, work and work for sure. There is absolutely no doubt on this. Apply the various memory techniques presented in these sessions to compliment your keen observation and the sense of organization. You will reach a point where you remember and recall information without much effort. Effective memory will become as natural as breathing. There is absolutely no doubt among memory experts, that natural and artificial methods are the best approaches to improve memory and remembering.

## Mechanical Method:

As we keep repeating the information over and over again, it is firmly engraved in our memory. This is how the religious scriptures, the epics were learnt by monks and scholars and transferred from generation to generation. The rote method has been used from ancient time to memorize and remember information.

Radio and TV commercials use this technique to motivate people to buy their products. Secret of a successful commercial is repetition. Secret of a successful memory is repetition.

Repetition of the material at certain intervals, referred to as spaced learning, should be preferred to lengthy periods of study. How long should these intervals be?

The most extensive studies in this direction have been conducted by Prof. Hermann Ebbinghaus, the German psychologist. He found, for instance, that a topic, which required 68 repetitions when learned in one day required only 38 repetitions when learned over three days. A more difficult topic, which required 504 repetitions in one day could be mastered with 342 repetitions when spread over three days. However, these figures vary considerably with the intensity of interest in the topic and the individual being tested. Yet, we can safely conclude that spaced repetition requires less time to memorize any information than memorizing at a single session. Thus use intense concentration when memorizing and use many shorter periods rather than fewer longer periods.

## Artificial Method:

These offer various techniques to store and recall information. The chain or link system, the hook or peg system, the phonetic alphabet system, the number code system belong to this category.

## 6. The Two Fundamental Principles of Memory

Every memory improving system is built on two principles.

1. Impression
2. Association

We need effective strategies for getting information into long-term memory as well as techniques for efficient recall. As an effective student of memory, you need to know as many strategies as possible to help store and retrieve the information. Effective memorization is the use of established and time tested memory techniques based on the two principles of impression and association. Sesame Street uses these concepts, along with repetition, very effectively in teaching the children.

## Impression:

"One picture is worth thousand words" or "One time seeing is worth thousand times hearing" or "Seeing with the mind's eye."

We think in terms of images and pictures and not in terms of words and phrases. Ability to form mental pictures is a natural trait of all humans and is the fundamental concept for almost all memory techniques.

We remember a person's face even though we cannot recall his or her name. We remember the most beautiful and ugliest faces in a crowd but the average face does not form an impression and we do not remember it.

Get a deep, vivid and lasting impression of the thing we wish to remember or retain in our memory. The reason we remember vividly the fairy tales and the nursery rhymes, which we learned when we were two and three years old, is that they stimulated our imagination. But Physics, Social Studies and other subjects do not stimulate our imagination and hence we forget the information the day before the exam rather than the day after the exam!

Easy road to memory is using pictures and forming association with the pictures. This secret was known to the earliest of civilizations and they used it. Egyptians used this method in their hieroglyphics to remember when to plant and when to harvest. Greeks and Romans used pictures to jot their memory. Greek orators pictured the points in their speeches hung on different items in the rooms of their homes. Thus forming vivid images in our mind is the best way to remember and recall information. This is the secret of effective memory.

We do not remember the ordinary, the routine and the normal. We remember the unusual, the not so ordinary, the abnormal, the absurd, the ridiculous, and the exaggerated. The recall of information is more effective if the images are abnormal, ridiculous, absurd and exaggerated.

Lincoln read aloud everything he wished to remember. He said, "When I read aloud, two senses catch the idea. I see what I read; second I hear it; and therefore I can remember it better."

## Association:

Psychologists tell us that association is one of the basic ways of learning. Mind is an associating machine. Children to adults learn by relating the new to the known. We frequently make associations to remember, often without realizing it. An educated memory depends upon an organised system of associations.

The persistency of association and the number of associations will ensure that you will be able to recall any information. Experts have a relatively easy time remembering new information in their field, because they can usually find some related information with which to associate the new information.

## 7. Types Of Memory

Almost all our daily activities rely on storing past experiences and recalling same from memory before present action. Memory is vital for human existence.

We have three types of memory:

1. Sensory Memory
2. Short Term Memory
3. Long Term Memory

## Sensory Memory:

Sensory memory takes in information from the environment through the five senses. It is the kind of memory storage where the information stays for a very short period of time, anywhere from a fraction of a second to a few seconds.

If the information is to last longer than a few seconds, it must be processed through immediate rehearsal or reviewed and transferred to short term memory. Contents of the sensory memory are constantly changing as new stimuli arrive. Sensory memory is the gateway through which the information must pass in order to be available for further processing by the short-term memory.

## Short Term Memory:

Short-term memory is like the writing on the sands on a beach. The writing is erased with the arrival of the next wave. It is like the writing on snow. It is erased with the next fall of fresh snow. The information remains in the short-term memory for a few minutes. The information is lost from shortterm memory unless it is rehearsed and recalled repeatedly.

Another aspect of short-term memory is its limited storage capacity. If we gather a large amount of information into our short-term memory, and if through rehearsal it is not transferred to long term memory, then as more information is stuffed into short term storage area, some of the information will be lost from this short term storage area.

## Long Term Memory:

The information once transferred to the long-term memory stays there for a considerable length of time. We may not be able to recall the information from the long-term memory but it is always stored there. Long-term memory holds information from few minutes old, such as the points made in a conversation, to several decades old. It resembles a huge library with millions of books stashed away on shelves and with sufficient shelf space still available for millions of books. Long-term memory never seems to run out of shelf space. Long-term memory has an enormous storage capacity and for all practical purposes can be considered as infinity.

## 8. Why do we forget?

It is easy to forget than remember. Forgetting is a common experience. Does forgetting mean that the information has been irrevocably lost, or been overlaid with other material. Research seems to favor the latter statement. Thus it suggests that the forgotten information could be remembered or retrieved with proper cue. So, why do we forget?

## a. Information has not been placed in the long-term memory

We do not process the information that we want to remember and store in our long term memory bank. So in the first place the information was never stored in the long term memory but was lost either from sensory or short term memory due to lack of rehearsal or periodic review.

## b. Interference

Researchers have found that if there is interference to new learnt material as a result of activities following this learning, then retention of learnt material is reduced. If the person sleeps after learning new material then retention is greater than if the person had other activities following learning.
c. Poor techniques for retrieval of information

The cause for this inability to recall is because the association cue was not sufficiently strong. Recall can be improved by providing proper or better association cues when storing information.

## d. Wanted to forget the information

This occurs when you have had a sad, painful experience. You want to forget and erase it completely off your memory. This is referred to as 'motivated forgetting.'

## e. High stress or panic situations

State of high stress or panic situations cause ineffective behavior and thus forgetting. Heavy stress is memory's worst enemy. Thus level of stress is pivotal to memory. Concentration is greatly influenced by the level of the stress. Stress reduction should be high on the priority list for sharpening our memory.

## f. Forgetting curve

Rapid forgetting takes place in the early moments of learning. Whatever we still remember after these early moments, we forget gradually. Mentally reviewing key points greatly increases the retention of this information by transferring it to long term memory storage.

Although many have put forward the theory that we can forget the information as a result of disuse, modern finding does not accept this theory. Whatever is learnt is stored 'permanently' forever, although it may undergo alteration or modification as a result of continued review from time to time. Sometimes, true, we may not recall the learnt or stored information but the information is still there in the memory bank. This belief is substantiated by the fact that even after twenty years one is able to ride a bicycle or recite a poem, although one hasn't ridden the bicycle or heard the poem for twenty years.

## 9. General Rules For Remembering <br> 1) Select what we want to remember

In many instances, we read for pleasure - a novel or as a routine task - a newspaper. In these instances, we do not consciously select what we want to remember. We tend to treat most readings in this fashion. On the other end of the spectrum is trying to remember everything we read in an article or listen in a talk. This is like trying to buy everything on a limited paycheck. Francis Bacon wrote, " Some books are to be glanced, some books are to be swallowed and others are to be chewed and digested."

## 2) Simply want to remember. Have a reason to remember

Some have a poor memory for historical dates. But these people will have facts and averages about baseball on their fingertips. This good memory for baseball information is because they want to remember these facts and figures.

## 3) Decide on the strategy for remembering

Do we want to use natural methods or artificial methods? If we are using the artificial memory techniques - which of the techniques are more appropriate to the information to be learnt. Use multiple coding for effective remembering.

## 4) Rehearse periodically

Periodic review is the most effective way to lock new information into our memory.

## 5) Observation

Keen observation is the key element and essential to remembering.

## 10. Brain and Related Findings

Brain research tells us that our brain is a 1600 gram gray mass floating in a electrochemical fluid. It consists of more than 15 billion neurons interconnected with each other to form complex electrical circuits called neural traces or neural paths. There are more than a trillion of these neural circuits. Many more of these neural traces are never formed in our lives. As we learn new tasks and have new experiences, new neural circuits are formed. As we repeat these tasks, the neural circuits associated with these tasks become well formed. The more well formed these neural circuits are - the easier to retrieve the thought (or the information). Thus the more often we recall information, the easier it is to find it from the storage banks.

Dr. Hans Berger discovered that electrical waves are given out by the brain and these are recorded on an electroencephalograph (EEG). The various states of brain consciousness are broadly classified into beta, alpha, theta and delta states.

Deep sleep state: delta state. Brain wave frequency is less than 3 cycles per second.
Dream state: theta state. Brain wave frequency is 3 to 6 cycles per second.
Drowsy state: $\quad$ Falling asleep or on the verge of waking. Brain wave frequency is 6 to 8 cycles per second.

Awakened but relaxed state: alpha state. Brain wave frequency is 9 to 14 cycles per second. This is known as the Berger rhythm.

Fully awakened state: beta state. Brain wave frequency is greater than 14 cycles per second.

## 11. Guaranteed Memory System

## a) Do it now

This is a million dollar idea for effective time management. It is also a million dollar idea for memory management. One of the prime principles in effective time management is to handle any paper only once. Same could be extended and applied to effective memory management. Do something now and immediately rather than later. The shorter order cook in a fast food outlet takes out a key ingredient promptly to remind him or her of the order.

## b) Write it down

The best way to store information is to write it on a piece of paper and have a well organized filing system. Nothing helps memory as much as writing. Get into the habit of keeping written information. Not even the memory experts can remember and recall all the information.

Great achievers always wrote the important things they wanted to remember and became great achievers. The non-achievers imagine they could remember without writing and they remain non-achievers. The great achievers and winners in life never trust their memory with important items. They always wrote them.

Carry 75 mm by 125 mm cards and a pencil with you all the time. When you get an idea or you get a thought to do something, write it. Have a note pad in the kitchen, if you run out of a grocery item during the week, jot it immediately on the pad rather than trust your memory until the grocery day.

## 12. Chain or Link System

The chain system can be used to recall information in a sequence. This system can be used to remember stories, business reports, contents of magazine articles, speeches etc.

In the chain system, association comes to our help. We must select cue words in such a way that they link with the one preceding or following and are easy to connect. If we do so then one word will recall the next one and we will remember them all without effort. All the cue words linked together form a chain or a link and hence the name.

## 13. Acronyms

Technique using mnemonics or acronyms:
a) The seven colors of the rainbow: ROY G BIV
b) The great lakes of Canada: HOMES
c) Trigonometric functions: SOHCAHTOA
d) Mathematical Operations: BODMAS, FOIL
e) Radio Detecting And Ranging: RADAR
f) Self Contained Underwater Breathing Apparatus: SCUBA
h) Reading for better comprehension: SQ4R

S - Survey
Q - Question
R - Read
R - Record
R - Recite
R - Repeat

## 14. Creative Sentences

Create or form sentences that will trigger your memory to remember relevant information. Some examples are given below.

Technique to remember the periodic table:
Lithium Beryllium Boron Carbon Nitrogen Oxygen Fluorine Neon

| Li | Be | B | C | N | O | F | Ne |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Little Betty $\underline{B} o s s y$ Cried $\underline{\text { No }}$ Oxy Faught Nelly

| Sodium | Magnesium | Aluminum | Silicon | Phosphorous | Sulph | Chlorine | Ar |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Na | Mg | Al | Si | P | S | Cl | A |
| Nancy | Magnifice | Always | Sitting | Plump on | Sofa | Clowned | Around |

Technique to remember the color codes for electrical resistors:<br>Black Brown Red Orange Yellow Green Blue Violet Gray White<br>Black Brown ROY G BIV Gray White<br>Black Brownies Roast Our Young Goose But Violates Gray Whales<br>Bad Beer Rots Our Young Guts But Vodka Goes Waste

## Technique to remember medical terminologies:

Cranial Nerves are:
Olfactory, Optic, Oculomotor, Trochlear Trigeminal, Abducens, Facial, Auditory, Glossopharyngeal, Vagus, Spinal accessory, and Hypoglossal.
$\underline{O n}$ Old $\underline{O l y m p u s}$ Towering $\underline{T o p ;} \underline{A} \underline{\text { Finn }} \underline{\text { And }} \underline{\text { German Viewed }} \underline{\text { Some }}$ Hops

## 15. Rhymes and Songs

A, B, C .....................X, Y, Z. Now you know your ABCD, next time won't you sing with me.
There are Thirty days in April, June, September and November and all others have thirty one days except February which has twenty eight days except in the leap year it has twenty nine days.

In Spring, we Spring Forward.
In Fall, we Fall Backward.
In fourteen hundred and ninety two, Columbus sailed the ocean blue

## 16. Hook or Peg System

When we check in our coat in a coat room, the attendant gives us a number. The coat will hang at this numbered hook. When we want our coat, we hand the attendant the number and he or she fetches our coat from the numbered hook. This numbered hook system in the coat room makes it easier to retrieve the coats. Of course, we cannot install actual numbered hooks into our brain cells. But we can create mental hooks that serve the same purpose to store and retrieve information.

We will create different types of mental hooks, such as picture-rhyme hook, object-numeral hook or phonetic-alphabet hook. Even though we may have a set of mental hooks, we cannot use them to hang things on until they are firmly attached into our memory storage area. Recite the names of the hooks until the words are well associated with each of the numerals. Also create a definite picture in your mind's eye for each of these hook words.

## Picture-Rhyme Hook

| One - | Bun | Six - Mix |
| :--- | :--- | :--- |
| Two - Glue | Seven - Heaven |  |
| Three - Tree | Eight - Fight |  |
| Four - Door | Nine - Dine |  |
| Five - Hive | Ten - Tent |  |

## Object-Numeral Hook

| One - | Unicorn | Six - | Star |
| :--- | :--- | :--- | :--- |
| Two - | Swan | Seven - | Lamppost |
| Three - | Tricycle | Eight - | Hourglass |
| Four | Table | Nine - | Bubble hoop |
| Five - Hook | Ten - Bat and Ball |  |  |

## 17. Comparison of Chain and Hook Systems

(a) Basic concept

In the hook system, we use a previously memorized list of words as hooks on which to hang what we wish to remember. The chain system does not use a previously memorized list, but links one cue word to the next one.
(b) Type of material we wish to remember

If the material consists of connected thoughts such as stories, reports and speeches, we will use the chain method. If the material consists of disconnected items such as a shopping list, we give preference to the hook system.

## (c) In and out of sequence

The hook system can be used to recall information that are both in and out of sequence. It makes no difference whether we asked for items $1,2,3,4$ or $16,5,14,8$, the items can be recalled using the hook system.

The chain system is cumbersome to recall out of sequence information. The only way to recall such information is to count from the beginning.

Thus the chain system is used for in sequence information. Although the hook system can be used for both in and out of sequence information, it has the obvious advantage over the chain system for out of sequence information.

## 18. Loci System

The Greek orators identified various items in the rooms of their homes on which to hang the main ideas of their speeches. As they delivered the speech, they mentally walked through the rooms of their homes and thus recalling the main ideas of their speeches for delivery. Since the location of the items in the rooms was used to retrieve the ideas, this system is commonly referred to as the loci system.

Identifying various items in the rooms of your home to locate the information is a powerful memory tool because you are working with items that are very familiar to you. You can extend this concept and use the rooms in your parent's home, relative's home, friend's home, rooms at your work place and even items on familiar streets.

Various parts of our body can be identified on which to locate the information to be remembered. Start either from the head or the toe and move sequentially to identify the body parts. Technique To Remember Reports, Articles and Speeches

It is necessary to identify the key words associated with the ideas we want to remember. If the key word is abstract or intangible, then we create a substitute word which is easy to visualize. We then can use the chain system, the loci system or the peg system to assist us in remembering and recalling the information in the reports, articles and speeches.

## 19. Improving Spelling <br> Types Of Spelling Errors

1. One wrong letter inserted.

Eg. sepErate instead of sepArate
2. Adding an extra letter.

Eg. proFFession instead of proFession
neCCessary instead of neCessary
3. Omiting a silent letter.

Eg. milage insteasd of milEage auxilary instead of auxillary
4. Forgetting a double letter.

Eg. embaRass instead of embaRRass

## Techniques For Spelling

# 1. Look for embedded word <br> Eg. to intERRupt is to ERR <br> never beLIEve a LIE 

2. Group letters and visualize

SAS KAT CHE WAN
SCH IZO PH REN IA
3. Creative sentences

Eg. rhythm - Red Hot You Two Headed Monster. (Harry Lorayne)
4. Form visual pictures

Parallel or Collision

## 20. Remembering Names of People

A good memory for names and faces is not only an important social asset but may become a determining factor in success in professional and business life. Some have a natural gift to remember names but that is rare as the gift of singing like Pavrotti or painting like Michelangelo.

You are delighted if an acquaintance whom you haven't met for a long time recalls your name when both of you meet. The sweetest sound to anybody's ear is hearing his or her name. There is no doubt that you tend to favor people or businesses who know you by name.

Why do we not remember people or names?

## 1. Faulty memory for faces - person doesn't recall having seen you before.

The trick for remembering faces is a keen sense of observation. More general information is not sufficient. Cultivate the habit and ability of remembering the characteristics of the person's face. However this is not a common problem, because visual images stick better than sound. Also we are continuously looking at the face while talking to the person - so the image sinks deeper and deeper into the long term memory but we heard the name once or twice and never bothered to repeat it or rehearse it so that it sinks into long term memory.

You have constant repetition of face but no repetition of name.

## 2. Bad memory for names - Face is familiar but can't recall name.

If you have poor memory for names, it is because you don't want to remember his or her name. People in the first place didn't hear the name.

James Forley former Post Master General of USA, and campaign manager for Franklin Delano Roosevelt, who had an amazing memory for names had this to say, "You must love people and be interested in them. Then you won't have any difficulty remembering their names and lots more about them."

## 21. Reasons For Not Remembering Names

a. Believing poor memory for names - self fulfilling.
b. Did not want to remember name.
c. Did not hear the name properly.
d. Heard the name but did not listen.

Concerned about creating a good impression.
e. Introduced to too many at same time \& in a hurry.

Not enough time to encode and form associations.
f. Improper storage

Need conscious effort to store. Did not make conscious effort.

## 22. Suggestion For Remembering Names

1. Believe you have a good memory for names.
2. You must want to remember name.

Everyone is important. Show interest in person.
3. Hear the name clearly.

Listen attentively. Listen attentively.
If name mumbled - get name spelt.
Focus on sound and not on spelling.
Mumbled again - get name written on paper.
Interest in knowing name, conveys you care.
4. Repeat name few times in the conversation.
5. Ask about origin of name and other significant details

Be cautious. Don't offend people.
No wise cracks about name.
6. Form a vivid association.
a. Associate name with celebrity or familiar names.

Shake hands with celebrity.
b. Associate with famous brand names.

McDonald's
Hilton - Hermine
c. Associate name with occupation.

Tailor, Mason, Carpenter.
Note: Person will not be doing job indicated.
d. Associate name with object.

Bill, Field, Ball
e. Associate name with color.

Violet, Green
f. Associate name with animals.

Fox, Perrot
g. Associate name with place.

Peter - Petersburg
Trent - Trenton
Nash - Nashville
h. Use rhymes to remember names
i. Identify an outstanding feature.

Use substitute word for name.
Associate substitute word with outstanding feature.
Paskaran-Pass car ran
7. Use name when bidding farewell.
"See you later, Sue."
"Nice talking to you, Jack."
8. Repeat name silently after person has left.
9. Write name on networking notebook.
10. Get introduced to few people at a time.

If introduced to too many - ask for their names later.
11. Get to a meeting or a party early.

Meet people one at a time as they come.
Take opportunity to introduce people to others.
12. Before attending meeting, get name list of attendees.
13. Ask person for suggestion of how best to remember his or her name.

## 23. Remembering Numbers

Mastering numbers is a definite advantage in every field, but perhaps is more important in all sales related work and insurance business. If you are selling any service - not a product - that does not involve a tangible object, then you will enjoy a big advantage if you have a good memory for figures and numbers. The person who has all the figures at his or her finger tips is held in high esteem by customers and colleagues. Colleagues seek him or her out for instant information. The person catches the eye of the boss and is always opening the doors of promotion.

## Recognize patterns in the number to be remembered:

My phone number: 4367236
The number 36 is repeated twice. 72 is twice 36 .

## Chunk numbers into three or four digit groups:

Most humans can remember seven chunks of information with ease. Each chunk of information to be limited to three or four digits. It is for this reason that telephone numbers, social insurance numbers and credit card numbers are broken into chunks of numbers.

Associate the number to be remembered to any known number:

## Use creative sentences:

The number of letters in each word represent the digits in the number to be remembered. Value of mathematical symbol pi $=$ May I have a piece $=3.1415$

## 24. Miscellaneous Applications <br> Technique to remember misplaced items:

If we can't recall where we placed a particular object - we try to recall where and when we used it last.

## Technique to remember forgotten information such as name:

Recall related known information and work your thinking towards the missing information.

## Technique for setting trip switches:

One good memory habit is to set trip switches so that it will trigger our memory system.
The trip switch can be to move an item from its customary position to a new location. Next time we encounter this item in its new location, the memory trip switch will be activated and the memory system will try to recall the information that is associated with the trip switch.

## Technique to remember daily activities:

Do not become a slave to the memory system but become a master of it. I came across a memory system on "How to remember the daily schedule". In my opinion, this is carrying it to the extreme and becoming a slave to the system. You are far better off writing the daily schedule on a 3 by 5 card and carrying same in your pocket for quick reference through the day.

However, frequently all of us have to remember single items which are out of the ordinary routine and therefore easily forgotten. Items such as mail a letter, buy bread on way home, wish a friend preparing for an interview. These items do pop into our mind whenever and wherever we are. Forgetting such things is always annoying and irritating and may affect our family, business and social relationships. These are best remembered by forming a strong visual association with one of the routine daily tasks.

## Technique to remember non-routine activities:

However, frequently all of us have to remember single items which are out of the ordinary routine and therefore easily forgotten. Items such as mail a letter, buy bread on the way home, wish a friend good luck for an interview. These items do pop into our mind whenever and wherever we
are. Forgetting such things is always annoying and irritating and may affect our family, business and social relationships.

## Technique to remember day of the week for any date:

Each day of the week has a number:

Each month has a number:

| January | 2 |
| :---: | :---: |
| February | 5 |
| March | 4 |
| April | 0 |
| May -- | 2 |
| June | 5 |
| July | 0 |
| August | 3 |
| Septembe | 6 |
| October - | 1 |
| Novembe | 4 |
| Decembe | 6 |

## Ex. May 17, 1991

Write the number for the month, ie. May $=2$
Divide the date by 7 and write the balance 17 divided by 7 , the balance is $=3$
Divide the year by 7 and write balance
91 divided by 7 , the balance is $=0$
Divide the year by 4 and write the whole number

Divide the total by 7 and write the balance
91 divided by 4 , the number is $=22$
Total $=27$

The day corresponding to this number is the answer.
Thus the day is Friday.

## Ex. January 28, 1991

Write the number for the month, ie. Jan
Divide the date by 7 and write the balance
Divide the year by 7 and write balance
Divide the year by 4 and write the whole number
28 divided by 7 , the balance is $=0$
91 divided by 7 , the balance is $=0$
91 divided by 4 , the number is $=22$
Total $=24$
Divide the total by 7 and write the balance
24 divided by 7 , the balance is $=3$
The day corresponding to this number is the answer.
Thus the day is Tuesday.

Numbers for the years: $\quad 90=0$

$$
91=1
$$

$$
92=3
$$

$$
93=4
$$

$$
94=5
$$

## 25. Other Memory Principles

## Remembering Principle

The more we try to forget something, the more we remember.

## Meaningful Principle

We remember the things that we want to remember.
We remember the things that interest us.
We remember the things that have meaning to us.

## Pattern Principle

Discover the pattern in a sequence of information.
My phone number: 4367236

## Slap On The Face Principle

Associate information to be remembered with an emotional experience.

## Sooner The Better Principle

Do immediate review - within 24 hours.

## More The Better Principle

Use multiple coding to remember information.
Do periodic review.

## Practicing Principle

Practice helps remember only the material practiced.

## Over-learning Principle

If ten repetitions help learn well enough for immediate recall, then greater than ten repetitions help retain and subsequent recall after a long lapse of time.

## Reminiscence Principle

Memory improves for a short period after learning.

## Primacy and Recency Principle

Greater probability of recalling the first and last few items in a list. Primacy may be either stronger or weaker than the recency for different individuals.

## Zeigarnik Principle

Effective learning occurs by breaking learning into small chunks with short breaks between each session for greater concentration.

## Von Restorff Principle

Greater is the tendency to remember out of the ordinary information in a list. This is also known as outstanding principle.

## 26. Use of phonetic alphabet as hooks

The earliest phonetic alphabet consisted of ten consonants of the English alphabet, namely $t, n$, $\mathrm{m}, \mathrm{r}, \mathrm{l}, \mathrm{j}, \mathrm{k}, \mathrm{f}, \mathrm{p}, \mathrm{z}$, representing the ten numerals in our number system. The words that can be formed by these ten consonants to represent the ten digits of our number system are somewhat limited in number. To give us a wider choice of words, we use most of the consonants of our alphabet. We group them according to sound with the above consonants representing the ten digits. Three consonants $\mathrm{w}, \mathrm{h}$ and $y$ do not fall into the phonetic classification and are not assigned to represent any of the digits in our number system. Similarly the vowels a, e, i, o, u also do not represent any of the digits. Thus the number code system developed is sometimes called the Phonetic Alphabet hook system.
$1-\mathrm{t}, \mathrm{d}$
6 - sh, ch, j, soft g
$2-\mathrm{n}$
7 - hard c, k and g
$3-\mathrm{m} \quad 8-\mathrm{f}, \mathrm{ph}, \mathrm{v}$
$4-r$
$9-p, b$
$5-1$
$10-\mathrm{s}, \mathrm{z}$ and soft c

The following rules are used to form the words in the phonetic alphabet hook system.

1. Words start with 'h' for numbers 1 to 9 .

Words start with 'd' for numbers 10 to 19 .
Words start with 'n' for numbers 20 to 29.
Words start with 'm' for numbers 30 to 39 .
Words start with 'r' for numbers 40 to 49 .
Words start with 'l' for numbers 50 to 59 .
Words start with 'ch or $\mathrm{j}^{\prime}$ for numbers 60 to 69 .
Words start with 'hard c' for numbers 70 to 79.
Words start with 'f' for numbers 80 to 89 .
Words start with 'b' for numbers 90 to 99 .
2. Use the vowels $\mathrm{a}, \mathrm{e}, \mathrm{i}, \mathrm{o}, \mathrm{u}$ with the appropriate phonetic alphabet to form the words.
3. If possible, limit to three letter words.
4. Form a word that can be visualized easily. Form your own word and choose your own picture based on personal experience for easy remembrance.
5. Consonants ' $w$ ', ' $h$ ' and ' $y$ ' have no values.
6. Double consonants are translated as one sound. Hence they are assigned only one digit. Eg: Coffee - 78 and not 788
Rattle - 415 and not 4115
7. In phonetic alphabet, we translate what we hear. Consonant which we do not hear are not translated.

Eg: Knife - 28 and not 728
Knight - 21 and not 7271
As ' $k$ ' and ' g ' are silent consonants.
The words of this phonetic alphabet hook system must be memorized inside out. Thereafter these words of this hook system can be used as a pair to recall the words in any list. Using this system one can instantly recall any item in a list as it appears - namely 23 rd item on a list.

Hook words for numbers from 1 to 60 based on phonetic alphabet


## Use phonetic alphabet for numbers:

The technique recommended by memory experts is the formulation of words, phrases or sentences using the phonetic alphabet. We use the consonants of the phonetic alphabet to represent the numbers and insert the vowels between these consonants to form words. Form a word or group of words or a sentence and then drop the vowels to recall the number. This technique is very effective but is very tedious.

My phone number: 436-7236
rmj knmj
RooM JoKe NaMe Joe

## Additional rules to follow in the use of phonetic alphabet for number codes:

1. Break the big numbers into groups of three or less.
2. Rules stated, earlier under the section on phonetic alphabet hook system, to form words to represent numbers are applicable but in order to have a wider choice of words, sometimes it is recommended to use only the first three consonants in any word to represent the number.

Eg. Vacation - 871, n does not represent any digit.
A variation to this rule is to use the first consonant in each word to represent a digit.
Eg. Mother went to the office - 32118

## 27. Concluding Remarks

On closing this seminar, I strongly recommend that you attend additional seminars, read memory teaching books or listen to memory teaching tapes. Some references are listed below.

I hope, I was able to convey to you that no one has a poor memory but only an untrained memory. Good memory is the result of learning some simple techniques. Memory is a trained skill. It can be mastered by each and every one of us. Improved memory is possible for everyone. It does not come easy but it can be acquired through desire for better memory, concentration, discipline and most of all practice. The only requirement is: PRACTICE. PRACTICE. PRACTICE.

Why do we keep doing things the same way all the time? Because we have always done it that way. We don't want to change our habits. We are comfortable with the status quo. We have closed our minds to finding out better and easier ways of doing things. If it had worked before and we are comfortable with, why bother to change? Change takes effort and sometimes can be painful. The choice is ours. The decision is ours to find easier and better ways to lead our life. So you have a choice to improve your memory by using the ideas and techniques presented here. Are you going to? The choice is yours. The decision is yours.

## References:

"Study Skills" - Audio in MP3 by N. Pas Paskaran (free download from http://humanpotential.cjb.net
"Memory Power" - Audio in MP3 by N. Pas Paskaran
(free download from http://humanpotential.cjb.net)
"Writing Exams" - Audio in MP3 by N. Pas Paskaran
(free download from http://humanpotential.cjb.net)
"Memory Made Easy" by Robert L. Montgomery
Learning Incorporated
113 Gaither Drive, Mount Laurel,
New Jersey, 08054-9987, U.S.A.
"Memory Dynamics" by George Best
Suite \#439, 4800 Kingswat, Box \#1235
Metrotown Shopping Centre,
Burnaby, British Columbia V5H 4J8
Canada
"The Memory Book" by Harry Lorayne and Jerry Lucas
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