

Mechanism of Learning Process

Dr. Ritu Sharma¹

¹ Sharda University

Received: 11 December 2016 Accepted: 31 December 2016 Published: 15 January 2017

Abstract

An attempt was made to understand mechanics of learning. The information showed that children generally use right brain to learn while adults use left brain. Learning is a function of conscious mind, subconscious mind, intellect and ego. The conscious mind learns with the help of sensory organs, the capacity of which is limited and its memory is also short-lived. To convert the short term memory into long term one, the material learnt by conscious mind has to be driven to sub-conscious mind by repetitions. More the repetitions, more strong the long term memory. The knowledge in the sub-conscious mind can also be stored if it is linked with things that are easy to remember. However, the recalling of information from subconscious to conscious mind is not possible in a disturbed state of mind. To alleviate this problem, a silent exercise, consisting of doing nothing for 10-15 minutes duration, is described. Besides, the silent exercise also helps in increasing the capacity of conscious mind to understand and learn. The intellect is the discriminative faculty of mind. Its main job is to protect the ego. If a learner considers himself to be excellent, intellect will do every effort to protect his excellence. The chanting of gayatri mantra is also advised as it sharpens the intellect of the learner.

Index terms—

1 Introduction

Learning is a fantastic phenomenon. That is why, a new born baby starts observing, feeling and learning things by himself. Evidences are also available in ancient literature that an infant starts learning in the mother's womb. Abhimanyu, a great warrior of the Mahabharata learned the art of archery in his mother's womb. It is a common experience that inspite of having learnt everything well, students commit mistakes in the examination hall. Likewise, singers sing well in bathrooms but forget when asked to sing in front of an audience. Why does such forgetting phenomenon occur at the crucial hour.

All parents want their children to be outstanding with 100% memory power. What to do to make it possible? For that, an understanding of the process of learning is required which would help in improving memory. Little information is available in literature about the mechanics of learning process which would possibly provide answers to the above questions. Therefore, an attempt was made in this direction so as to help the students to improve their performance in examination. A possible mechanics of learning process is described in this paper.

2 II.

3 Learning Process in Children

It is our common experience that a two year old child will easily learn a new language which an adult will find difficult to learn. This is so because children use the right part of their brain to learn while adults use left brain. Children do not ask questions of how and why? They accept whatever teacher or mother teaches them as truth. The right brain simply accepts information. Children learn speaking before they learn the alphabets. Their brain also starts making grammar. No child learns grammar before speaking words. The right brain is alive until the

42 child attains puberty. It is the stage when child moves out from right brain and wants to liberate himself from
43 mother and teacher. He acquires questioning tendency before accepting the information. This happens when left
44 brain takes over the right brain. His learning process is somewhat slowed. Adults understand first and memorize
45 later while in children, reverse is the case. During childhood, all of us have memorized mathematical tables
46 and poems simply by repetition but without understanding. They are still in our memory. This shows that the
47 repetition of information helps in long-term memory.

48 Chanting of Gayatri mantra for 2-5 minutes daily in the morning is advocated as it tends to keep the right
49 brain open (Prabhakar, 2009). According to Acharya (2000), chanting of this mantra generates vibrations which
50 sharpen the intellect by activating different glands. The mantra has the purport that, "May God expand my
51 intellect and make me intelligent." III.

52 4 Mechanics of Learning Process

53 The learning process involves understanding and memorizing as well. It is a function of internal organs of the body,
54 namely, conscious mind, subconscious mind, intellect and ego. As such understanding takes place at four levels:

55 1. Conscious mind 2. Subconscious mind 3. Intellect 4. Ego a) Working of conscious mind Its working could
56 be considered similar to a TV screen on which the images are projected. The conscious mind gains knowledge
57 with the help of sensory organs and past information etc. and the images of the same are projected on the mind
58 screen. The information, whatsoever, is present at a particular time is called awareness. Bigger the screen of
59 conscious mind, more is the information or knowledge contained in it and vice versa. Thus, its size matters in
60 grasping and containing the knowledge. The memory of this mind is limited. Thus main problem or challenge
61 in education lies as to how to increase the capacity or space of conscious mind. The memory of conscious mind
62 is also short-lived and subject to forgetfulness. b) Creating more space or capacity of the conscious mind Some
63 evidences of inadequate space in mind are available in ancient literature. Tulsi Saheb, a great saint of India asked
64 his disciple to cleanse his mind because his mind was full of clutter of thoughts ??Puri and Sethi,1995). Thus,
65 there was no space available in his mind to accommodate further knowledge. Every teacher goes on feeding the
66 information to the students without caring whether their mind is in a position to grasp or absorb it. This causes
67 confusion in their minds. Thus, students should be taught simultaneously to keep their minds clean or empty so
68 that they can readily absorb new knowledge. Clean or empty mind means stillness of mind or maintenance of
69 an equanimous state. The mind whose stillness is distorted is not able to concentrate. For maintaining stillness
70 of mind, Swami (2014) a has discovered a silent exercise which he calls as " Chup sadhan". He has designed it
71 for spiritual purposes as stillness of mind is also required for the upliftment of the soul. The stillness of mind is
72 of great use in learning process. The technique is described in brief, as under: c) Silent technique for stillness of
73 conscious mind It is based on the inherent attribute of the soul that it is neither doer nor enjoyer of the fruit
74 of actions (Bhagwad Gita 13/31*) as quoted by Swami (2014) It is an effortless and natural process. If you
75 make efforts to still the mind you will never succeed just like you cannot succeed in making muddy water clear
76 by stirring it. In contrast, if you just allow the muddy water to stand, mud will settle down on its own and
77 water will become clear. A similar principle holds good while settling the mind and its passions. The stillness of
78 mind has also been advocated by Gillchrest (1999) to tap the hidden powers of the universal mind . Prabhakar
79 (2007Prabhakar (, 2009Prabhakar (, 2015)) has used a similar silent exercise with some modifications and
80 has observed spectacular increase (15-20%) in the marks of the students . Swami (2014) a has claimed that
81 if a person enters into his own silence even for 1 to 2 seconds, he acquires infinite intelligence and strength. It
82 appears that all the scientific discoveries have been made when the scientists were stationed in their absolute
83 silent state. The mechanism of the silent exercise could be also explained in the terms of duster and blackboard.
84 In the class, the teacher uses duster to erase the blackboard, in other words, he increases the capacity or space of
85 the blackboard by erasing off the material. Likewise student can employ this silent exercise to erase the material
86 of conscious mind. The thoughtless state of the conscious mind amounts to erasing off the material from the
87 conscious mind and driving the material to the subconscious mind. Thus the silent exercise should form an
88 integral part of education program. The students should be taught to sit in silence for 5 -15 minutes before the
89 class begins. As such, the memory of conscious mind is short-lived and to convert it to long term one, the help
90 of sub-conscious mind is taken.

91 5 d) Working of Sub-Conscious Mind

92 It is also called "Chit" in Indian literature. It is a store house of information or memory and its capacity is
93 infinite. It retains all the material that has been learnt and works mainly on the principle of repetition. More the
94 repetitions, more is the retention of the material. Students must be made to believe that every subject is very
95 easy. This belief will accelerate the learning process. On the other hand, if a subject is labelled as difficult, the
96 students will not even attempt to learn that subject because the word "difficult" itself will work as a barrier in
97 the process of learning. Sometimes, larger pieces of information, although easy to understand, yet are difficult to
98 memorize (Prabhakar, 2015).In such situations he advises to break up the large information into small segments
99 which will facilitate the memorizing process.

100 He explains it with a verse, "Apavitrah pavitrova sarva avasthan gatopiva yah samreth pundareekaksham".
101 After reading it once, it may not be memorized by the student. So read first two words of this verse 10 times

102 with open eyes and then repeat it effortlessly 10 times with eyes closed. Now read the first four words of the
103 verse 10 times with open eyes and repeat 20 times with eyes closed but without any effort. If you feel effort or
104 strain, repeat the process till you are able to read the four words effortlessly. Do not proceed further without
105 effortless repetition. It may appear boring, but you are doing something which you were not able to do earlier
106 using the power of the subconscious mind. Now read the next three words of the verse, 10 times and repeat
107 the same effortlessly with closed eyes. If effort or strain is felt, one should repeat the process. Afterwards, read
108 whole of the verse, 3 times and repeat the same with closed eyes. Keep on repeating effortlessly without any
109 strain. Practice repetition of the whole verse 5 times, 3 times a day for 10 days. It will get embedded in the
110 subconscious mind on a long term basis. Lekhi (2015) suggested whatsoever a child learns should be re-affirmed
111 after the first 10 minutes then after 10 days and then after a week, then after a month and then after 3 to 6
112 months. This will ensure long term memory. Care should be taken that the student does not feel any strain or
113 stress in his mind while repeating the process. As such, the number of repetitions may depend on the calibre of
114 a particular student.

115 The question arises as to why we have forgotten so many things because we have left the learnt material in
116 the conscious mind itself and have not driven it to the subconscious mind with effortless repetitions. The long
117 term memory can also be assured if the student links the information with the things, easy to remember. If he
118 links the names of planets with a statement, "My very educated mother just showed us nine planets", where
119 the first alphabet of each word denotes the names of each planet of the solar system: Mercury, Venus, Earth,
120 Mars, Jupiter, Saturn, Uranus, Neptune and Pluto. Similarly colours of the rainbow could be learnt by the
121 acronym "vibgyor" denoting different colours. The memory of an outstanding information creates a niche in
122 the mind thus helping it to remember on a long term basis. Such information may consist of disasters, bomb
123 blasts, demonetization etc. Likewise, pointers in the form of charts and tree diagrams may be tried to recall
124 the information from the subconscious memory. e) How to recall the information from the subconscious mind
125 Recalling the information from the subconscious mind to the conscious mind is not possible in a disturbed (fearful)
126 state. Similarly envy, jealousy, tension, fault finding and blame also disturb the peace of mind, blocking the flow
127 of information from subconscious mind to the conscious mind. So the students' mind should be as peaceful as
128 possible. This could be achieved if they resort to silent exercise (as described earlier) for at least 2-3 minutes
129 before attempting the paper in the examination hall or the class. This will ensure continuous flow of learnt
130 material without any forgetfulness. The students should not resort to the thinking as it is a function conscious
131 mind. The thinking needs to be avoided as it also obstructs the flow of information from subconscious mind.
132 It is a common experience that if one forgets something as to where he has kept it, he starts thinking about it
133 but it never comes to his mind. The moment one stops thinking, all of a sudden, it comes to his memory. Lord
134 Krishna also advises Arjuna to establish oneself in one's own silence before starting any work (Yogananda, 2014).

135 6 f) Working of Intellect and ego

136 Intellect is the discriminative and determinative faculty of the mind. Its main job is to protect ego. The ego is
137 I-ness of the consciousness, what you consider yourself to be (Sharma, 2014). In other words, ego is a shape or
138 form acquired by the self: soul (Ahm) which by acquiring a shape (Akara) of any object, may be of body etc
139 becomes ego (ahamkara). The soul, being animate, an essence of God, is the very infinite source of intelligence.
140 In fact, the intelligence of the soul is reflected in the intelligence of the mind. With silence practice, intellect also
141 gets rest and becomes pure.

142 Learning process is conditioned by the kind of ego of a student. If he considers himself to be an outstanding
143 student, his intellect will do every possible effort in learning to make him an outstanding learner. Swami (2013)
144 reported that whatsoever the mind thinks in the presence of the eternal soul, the thought is manifested into a
145 visible form in due course of time. It is the intellect that decides what one has to do to protect one's ego. It
146 directs its decision to the mind, which in turn conveys its orders to the concerned sensory organs for the needful.
147 Lastly, the ego of a student must possess an element of unselfish serving attitude so that the knowledge gained
148 by him is used for the upliftment of poor masses ??Vivekananda,1969).¹

¹Year 2017

b.

The technique consists of the following steps:

1. Sit in a comfortable position with spinal chord erect on carpeted ground or in a chair with both the hands in the lap. The right hand palm should be on left hand palm and the palms should face upwards. This is called Brahmanjali Mudra (Sidharth and Puri, 2014). This helps in stilling the mind.
2. Keep your eyes closed and think as if you are going to sleep, but sleep is to be avoided. The simple thought of sleep helps one to withdraw one's attention from the world to eye-brow centre (concentration centre).
3. Keep in mind that God is present everywhere and everything is happening in His presence. So, whatsoever happens is justice as injustice can't prevail in God's presence. Accept it from the heart.
4. Sit quietly with doing nothing and no expectation. Even the expectation of mind to be still should not

[Note: be there. When you don't have any expectation, you do nothing, neither physical nor any mental activity. (Bhagwad Gita, 3/18 ,6/25). 5.]

Figure 1:

149 Year 2017

150 .1 IV Conclusions

151 From the above discussions, it can be concluded that learning takes place at four levels, i.e. conscious mind,
152 subconscious mind, intellect and ego. The working of conscious mind is based on the sensory organs while that
153 of sub conscious mind, on the repetitions of the subject. The intellect protects the ego and does every effort to
154 protect the contentions of the ego. A silent exercise of 10-15 minutes duration, consisting of doing nothing, is
155 described as it enhances the learning process by improving the overall efficiency of the learning process.

156 [Swami ()] , R S D Swami . Chup Sadhan. Sehj Sadhana 2014. Geeta Press. p. .

157 [*The numerator 6 denotes the chapter of Bhagwad Gita while the denominator, 25 denotes the verse of Bhagwad Gita. Likewise
158 *The numerator 6 denotes the chapter of Bhagwad Gita while the denominator, 25 denotes the verse of
159 Bhagwad Gita. Likewise other numerators and denominators denote the chapters and verses of Gita
160 respectively,

161 [Acharya ()] *Activation of internal power centres by Gayatri sadhna. Super Science of Gayatri*, S R Acharya .
162 2000. Haridwar, India: Yugantar Chetna Press. p. 1318.

163 [Osho and Puri ()] ‘Dhyan (Brahmanjali Mudra). Mudra Chikitsa p’. S Osho , R Puri . *Osho Dhara Trust* 2014.
164 p. .

165 [Sharma ()] ‘Ego as the basic cause of unethics and approaches to dissolve it’. R Sharma . *Global Journals.Org.*
166 *Global Journal of Human Social Science* 2014. 14. (Issue 4 Version 1.0)

167 [Gillchrest ()] *How to tap the Universal Energies. The Power of Mind*, M Y Gillchrest . 1999. New Delhi: Crest
168 Publishing House.

169 [Prabhakar (ed.) ()] *Miracles of non-doing in Education*, R Prabhakar . Rishi Vani VI (ed.) 2015. Pune, India:
170 Rishi Vachan Trust Publication. p. .

171 [Prabhakar ()] ‘Secret of 100% memory, Left and Right Brain’. R Prabhakar . *Rishi Vani* 2009. Rishi Vachan
172 Trust Publication. 12 (1) p. .

173 [Prabhakar ()] *Super memory and intelligence. Pp. 1-30. A Rishi Vachan Trust Publication*, R Prabhakar . 2007.
174 Pune, India.

175 [Swami (2014)] * Swami , R S D . *Bhagwad Gita. Sadhak Sanjeevani*, (Gorakhpur, India) 2014. 2/14, 2/64, 3/18,
176 3/34, 5/19, 6/25,13/31.14/24. Geeta Press.

177 [Puri and Sethi ()] *Tulsi Saheb (Saint of Hathras). P. 78-79. Radha Soami Satsang Beas*, J R Puri , V K Sethi
178 . 1995. India.

179 [Swami ()] ‘Vikaron Se Chhootne Ka Upay’. R S D Swami . *Nityayog Ki Prapti*, (Gorakhpur, India) 2013. Pp114
180 Geeta Press.

181 [Vivekananda ()] ‘Vivekananda: His Call to the Nation’. Vivekananda . *Advaita Ashram* 1969. p. .