THE ANCIENT APPROACH TO LEARNING IN MYANMAR IN TODAY'S CONTEXT

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Abstract

The ancient approach to learning in Myanmar can be traced back to the verses composed five centuries ago although its origin may be before Christ. The eight functions of learning consist of listening, thinking, questioning, talking, examining, note-taking, memorizing and reciting. Due to the scarcity of writing materials in the then agrarian society, it is no wonder that reading and writing were not included. The ancient approach to learning should not be misunderstood as rote learning because included therein are dynamic learning functions like thinking, questioning and examining. All these learning functions are useful and effective when these are adapted and extended in the light of modern learning aids.

Learning is briefly defined as the process of acquiring skills, knowledge, and/or competence (John Burke, 1995). Similarly, Thompson and Zeuli (1999) defined learning as conceptual advance being the development of new and usable understanding (Hammond & Sykes, ed., 1999). These two definitions directly fit in the two out of the four pillars as foundations of education recognized by the United Nations Educational Scientific and Cultural Organization (UNESCO) namely: learning to know and learning to do. A broader view of learning is given by Melton (1950) as obviously basic to the education process as well as a fundamental process or characteristic of mind.

The oriental way of learning is often criticized as rote learning by westerners as well as western educated scholars in the East.

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It is generally assumed that, by rote learning, a learner (also called as student and pupil in institutions) tries to memorize the whole text regardless of understanding or scrutiny. When a learner recites a text or verse again, it looks like chanting or ritual to the wondering of strange listeners. This kind of learning can be traced to monastic education especially in Thailand and Myanmar, because in ancient days children's literary education started in Buddhist monasteries where the monks provided education as well as cultural heritage and Buddhist studies.

In fact, the ancient approach to learning in Myanmar is more than rote learning and memorizing. This kind of learning approach consists of eight functions as stated in the verses by a famous monk-poet by the name of Shin Maha Rattathara about five centuries ago. Although equivalent English terms cannot be found, these functions are translated to the nearest meaning as follows:

1. Listening
2. Thinking
3. Questioning
4. Talking
5. Examining
6. Note taking
7. Memorizing
8. Reciting

This approach to learning might have originated from Buddhist or Hindi or Sanskrit literature in India, or may be further traced to the days of Taxila many centuries before the Buddha. As some of the above translated terms may not reflect the exact meaning of those functions, the writer would like to make an attempt to explain and interpret those meanings both in the original context and the present day context followed by discussion and application.

1. LISTENING

Listening or hearing means receiving the knowledge or wisdom by attentive ears. Since an idea or knowledge is perceived mainly with hearing sense, one basic necessity of listening is concentration. In the olden days, there were no amenities or teaching /learning aids, and the transfer of knowledge was done verbally through personal contact; a learner needed to go to the learned to learn by listening first. The learning by listening in those days is illustrated in figure 1.

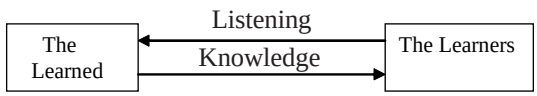


Figure: 1

Just listening does not necessarily mean accepting or obeying, but may lead to remembering or memorizing. In the olden days, the most common place for listening is a monastic school but not exclusively. To learn by listening, the learners could go to learned people or wise men individually wherever they were. Even listening to the elders during day-to-day work is also included in this function. In fact, listening type of learning starts when babies are in their mother's bosom. Thus listening can be done formally in schools and informally outside the school. In the olden days, both learners and the learned must be present at the time of talking/listening. In contrast, with the advent of audio/video aids, listening could follow any time and place convenient to the learner so that both parties

need not be present at the same time. The learning by modern aids is illustrated in figure 2.

Public hearing in modern governance is a way of listening to the voices of grass root people civil society, intellectuals and other parties concerned. Through this process a government agency could avoid mistakes and serve the interest of the public better. This application automatically fits in another pillar of foundations of education: learning to live together.

One aspect of learning that is equivalent to listening but not listed in functions is reading. Reading was not mentioned in these functions because in the old days the writing materials were scarce and the access to these materials (such as palm leaf) were limited to a few people mostly monks in temples. Katz (2003:50) mentions that in agrarian society, dominant technologies are oral, limited writings, and scriptoria.

2. THINKING

The term "thinking" as translated by the writer may be too simple or too broad but in essence it is meant for the use of mental faculties such as self-reflection, imagination, conceptualization, inventing, creating, and problem solving. It is the mental process that interacts within a learner one-self. This function could be developed through practice, concentration and strong will. The thinking process consists of attempts to find out causes and solutions, conducting experiments, and finding relationships among variables.

According to UNESCO report (1996: p.88), exercise of faculty of thought entails two-way traffic between the concrete and the abstract. In teaching/learning process, it is important to combine two methods of thinking or logic: the deduction and induction. In a particular field of learning, one method may be more relevant than the other, but in most cases, coherent thinking requires a combination of the two.

Using these two methods, conceptualization of theoretical frame work, data analysis and conclusion drawing could be achieved as part of the thinking process of learning. Naturally, those who conduct research work involve in the thinking function of learning.

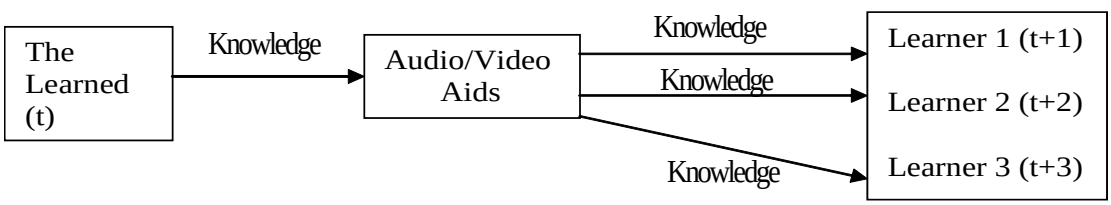


Figure: 2

t = time period t+1= next time period t+2= second next time period

Thompson and Zeuli (1999: p.346) interpret thinking as such that learners must actively try to solve problems, resolve dissonance between the way they initially understand a phenomenon and new evidence that challenges that understanding, put collections of facts or observations into patterns, make and test conjecture, and build lines of reasoning about why claims are or are not true. They compare the importance of thinking to a learner's knowledge as photosynthesis is to plant's food. They are bold to assert that students do not get knowledge from teachers or books, or experience with hands-on materials. Knowledge is created by the learners by thinking, using information and experience. Thinking is so important that there cannot be learning without thinking. Their view of thinking agrees with that of Bruner et al. (1956) who wrote over four decades ago that learning is an outcome of thinking.

Imagination or imagining is not a wild thinking or purposeless dreaming but a guided thinking toward a better knowledge or skill. New ideas usually start with imagination. In order to learn, one must have awareness of leaving something behind while reaching something new. This kind of awareness must be linked to imagination. When people are stuck with repetitiveness and uniformity, learning is discouraged, resulting in a kind of inertia. Imagination breaks through that inertia in people (Greene, Maxine, 1995: 20-21).

Creating part of thinking process could be established only when the learners believe in their creative identity. At the beginning, it should be the responsibility of parents and teachers to identify their creative abilities. According to the National Advisory Committee on Creative and Cultural Education, "some of the common capacities and sensibilities of creativity such as curiosity, recognizing and becoming more knowledgeable about the creative process should be fostered" (NACCE, 1999). In fact, the students are not short of creative attitude and talent. According to Jeffrey, a European research project shows the traits of creating as follows:

1. The students use their imagination and experience to develop their learning.
2. They strategically collaborate over tasks.
3. They contribute to the class room curriculum and pedagogy.
4. They evaluate critically their own learning practices and teacher's performance.

(Jeffrey, 2001)

Another important aspect of thinking is problem-solving which could be accomplished through many approaches. Mayer classifies problem-solving into creative and routine problem solving. In creative problem solving, the problem solver confronted with a problem and must construct a new solution plan. The problem solver must produce something new. In the case of routine problem solving, a problem solver already knows the method of solving a given problem (Mayer, 1997: p.475). One of the approaches is, to identify the problem, find the relationship and causes, setting criteria, considering various ways of solution and choosing the best feasible solution.

According to Glathorn, problem-solving accomplishes several key educational goals as follows:

1. It makes learning more interesting by providing an optimal level of challenge.
2. It makes knowledge come alive, thus increasing the likelihood that the information will be remembered.
3. It helps students understand when to use certain processes.
4. It results in the mastery of processes that can be used again and again. (Glathorn, 1993: p. 295-296)

Looking at above three elements of thinking among others, it is obvious that thinking is the most difficult function of learning where highly intelligent learners can excel resulting in a slow process even for bright learners. However, the significance of thinking as a learning function is that, it can negate the view that oriental learning is merely rote learning. One of the advantages of thinking is that through it a skeptical learner can eliminate one's doubts by using one's own mental faculties. If it is not satisfactory, the learner can use the function of questioning.

3. QUESTIONING

There is a saying in Myanmar that "the more one ask questions, the more answers one gets". In any country, children start learning by asking questions to their parents and elders. Question means asking for clarification in order to eliminate doubt or to satisfy curiosity. According to Joel Foreman, "optimal learning takes place if a student is able to seek immediate clarification or amplification when he or she encounters problems (Foreman, 2003)". Dillion emphasizes that student questions can be very useful at several stages of the learning process (Dillion, 1986).

Questioning is broadly referred to as an inquiry. In this context, Mertinello provides a broad dictionary definition of inquiry as the act or instance of seeking truth, information, or knowledge about something. According to k-12 curriculum standards, inquiry is typically defined "in terms of higher-order thinking, classifying, interpreting, analyzing, summarizing, synthesizing, evaluating, decision making, and meta cognitive skill….. Also named is a process at the very heart of inquiry: questioning". According to Martinello, a good question can start a search, but a line of questioning deepens it. "Sustained dialogue about a topic helps to draw out a logical progression of questions" (Mertinello, 1998: p. 164, 170). In spite of this broad definition, our discussion in this section will focus only on questioning.

In the times of Socrates and Plato, their followers were questioned to think logically for a correct answer. From the learners' side, questions are asked for new knowledge that could be connected to existing knowledge and create a higher level of knowledge. More over, students' questions in a class room could serve as a feedback to teacher because some points may be left with the presumption that students would have already known. Sometimes, a question represents an argument usually looking from an alternative point of view resulting in a new knowledge.

However, questions are rarely invited by some teachers, regarding the questioning

students as annoying while a few teachers are happy to answer students' questions. The dilemma in a class room under tight lesson plan is that a teacher cannot afford to accommodate many questions due to time constraint.

When a teacher explains the questioning student, it also benefits the other students who wanted to ask but felt too shy to ask. The benefit of questioning is illustrated in figure 3.

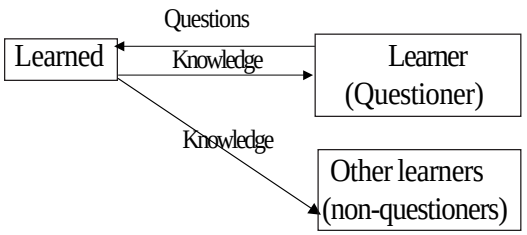


Figure: 3

Class room questions can also be treated as supplement to listening approach to learning. It also reflects that the one who raises question has listened well and thought well with a passion to learn.

Questioning is not limited to class room learning only. A learner usually has opportunity to ask the learned people, parents and elderly people. Modern practice of interview and questionnaire are in essence questioning with a purpose to analyze and draw conclusion. However, there are ethics on questioning, one of which is that a learner should first look at the books (or browse internet in these days) before taking other people's time. A researcher using interview approach should observe a number of ethical rules in asking questions orally.

4. TALKING

Another oral approach to learning is talking about the topic already listened to or read. Here, talking refers to a way of exposing one's ideas and knowledge with the purpose of confirming and extending them. The term "talking" may have ancient context where the only medium of communication is personal talking. Nowadays, this approach can be extended to teaching, tutoring, conducting workshop, participating in conferences, seminars and forums. Again, this function can be applied to writing and broadcasting as well because both talking and writing are the most common media of expression. Saljo states that thinking to a large extent is achieved through talking because talk is a mode of thinking. According to him, it can be assumed that "there is a continuity between what goes on inside and outside the heads of individuals in terms of semiotic resources used for thinking" (Saljo,1996: p.85).

When a person exposes one's knowledge and opens mind, comments and new ideas flow in from the other party or the general public. One can access many views and approaches that were not thought of previously. Following this advantage, thesis writing students used to talk about their concepts on relationship between variables before they set out writing their conceptual framework. Their peers, seniors and advisers will make comments that may be useful in most cases enriching their knowledge. Through such discussions, learners become clearer about their concepts and ideas. Current day techniques such as "focus group discussion", "quality circle" and "brainstorming session" are talking venues where knowledge can be

synthesized and ideas crystallized. In the olden days, elderly Myanmar people used to gather at "green tea circle" where they used to argue about religion, literature and culture. Through arguing one's view and listening to others' views, they learnt a lot. Thompson and Zeuli (1999: p.347) support that discussion is an externalized social way of thinking as well as interactive thinking out loud. The talking and listening in groups resulting in knowledge transfer is illustrated in figure 4.

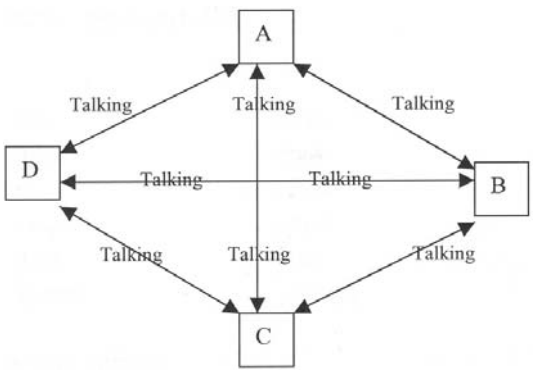


Figure: 4

Note: The alphabets represent learners whereas arrows show the flow of knowledge through talking in a group. Every body contributes and receives knowledge at the same time. Here, talking and listening are reciprocal.

As mentioned earlier, in today's context, writing can be grouped under this function. Applebee views writing as a tool of learning rather than as a means for displaying knowledge acquired (Applebee, A.N., 1991). Yinger and Clark assert that writing fosters learning by giving the following reasons.

1. Learning is improved because memory elaborates information when a learner writes.
2. Writing requires the learner to express in symbols knowledge that was acquired in a different form. Transformation of knowledge increases new understanding.
3. Writing seems to involve the entire brain.
4. Writing provides for both immediate and long-term self-provided feedback.
5. Writing requires the learner to connect and organize knowledge thereby strengthening the bonds of learning. (Yinger & Clark, 1981: p.306)

Whereas talking is a communication process to confirm and/or expand a certain knowledge, examining is the inner process of a learner.

5. EXAMINING

Examining is not only different from examination whereby a learner is tested but also is opposite to the latter. Examining, here, includes checking the authenticity as well as verifying, analyzing and assessing facts and logic, of the new knowledge. It is the basic principle of learning that one must not automatically accept any statement, concept or assertion regardless of the one who makes. In fact, the Buddha reminded his disciples to examine and question anything purported to be his teaching. Ronald Reagan used to quote a Russian saying, "Trust, but verify".

This approach to learning necessitates a learner to be skeptical, and test the knowledge acquired before accepting it fully. Moreover, a learner should explore any possibility of application to the real life situation. Many

physical sciences can be tested and proved in a laboratory. However, social science theories could be accepted by basing on assumptions or preceding events. There is no guarantee that the weakness of a particular knowledge would be discovered in the first examination. The function of examining should be taken as aptitude application rather than a perfect skill.

In fact, conclusions are drawn in the context of the situation where the events are observed. These conclusions or concepts or knowledge are just situated learning so that they are required to be tested under different situations. Gruber et al. assert that "learning is a matter of passing through successive situations in which one becomes a competent actor". To them, knowledge is not conceived as an abstract entity that is independent of situations. As knowledge is principally bound to situations, it must be tested until it is finally proved (Gruber et al., 1996: p.169-170, 175).

In the process of examining new knowledge, notes can be taken to jot down the findings whereas in the initial stage, examining can be facilitated if notes are already taken about the important points.

6. NOTE-TAKING

Note-taking is taking aware of important points in listening so that it can be retrieved and interpreted later. Usually note-taking is done by writing down, but in the olden days mental note-taking is common because of the scarcity of writing materials. According to Phye, the students, while listening to a teacher explain something in class, try to identify the important information that they do not already know and write it down (Phye, 1997: p.57). In modern times, note-taking can be done while reading an article, paper, or book for important points as well as controversial ones a learner may not agree for the time being. Moreover, note-taking can be done while reflecting one-self or when a certain idea strikes suddenly in one's mind. The notes taken could be used for memorizing, reflecting or further clarification.

Anderson and Armbruster (1984: p.307) have some observations about note-taking because note-taking seems effective as a study aid only under two conditions:

1. It must require the deep processing of knowledge. The learner has to comprehend, organize, and make personal sense of the knowledge.
2. It should focus on the essential elements of the learning task.

In the absence of modern recording devices, note-taking needs to be done in a very fast way that the learner has to use abbreviations and symbols. Glathorn (1993: p.292) explains that mnemonic devices or memory tricks have been used for centuries.

7. MEMORIZING

Memorizing or remembering is an attempt to remember what has been learnt as a new knowledge. In other words, it is learning by heart. Steiner (1999: p.217) supports this kind of learning because it optimizes learning efficiency when it is carried out systematically. Phye (1997: p.50) defines it as the conscious awareness memory processing that involves memory search and retrieval. It is not an

automatic process involving memory. He emphasizes that memory not only plays a role in the acquisition, storage, and retrieval of declarative and procedural knowledge but also appears to play a critical role in problem solving (use of strategic knowledge) (Phye, 1997: p.50, 56). To go back to Glathorn, mnemonic devices or memory tricks are means of memorizing. They work effectively because they serve to strengthen the relationship between what is known and what is to be learned (Glathorn, 1993: p.292).

Memorizing is the very function of oriental learning that is labeled as rote learning and often down-graded by modern scholars as mechanical and parrot learning. This kind of view seems to base on the assumption that a learner tries to memorize when one does not understand. Even Steiner partly accepts this view when he says that many students turn to memorize to cover their tracks when they fail to grasp the meaning of some events, logical connection, or principle. Sometimes, it can be a final alternative if a learner failed to understand the text and yet must, for whatever reason, repeat the content. However, he admits that "rote learning" can be transferred into the higher learning process of semantic network building, by concentrating on the meaning of the items being dealt with (Steiner, 1999: p.171, 217, 284). In fact, ancient learning started with memorizing as the writing materials were scarce. Yet, memorizing helps a scholar or a professional such as a surgeon or engineer to decide and act on the spot without taking trouble to refer to a book or a computer. Any knowledge retained in one's memory is the knowledge one can apply anytime anywhere. Learning by heart does not necessarily mean that the learner does not understand; in fact, it is easier to memorize, when one understands.

Mayer (1997) defends that rote learning is not a useless one because learning is often assessed through test of retention. If the goal of instruction is mastery of a specific behavior, rote learning is sufficient. Later, Foreman (2003) supports rote learning that a successful rote learning involves facts and figures. Some of the students will reflect on the material, commit it to long term memory, and transform it into active hypotheses and real-world application.

As memorizing can be strengthened by reciting whereas reciting needs memory recall, memorizing and reciting are two sides of the same coin.

8. RECITING

Reciting is the act of retrieving the already acquired knowledge on the edge of one's lips with an advantage that you can recite anywhere anytime without any cost. As a spin-off of reciting is a feeling of pleasure and sensing of youth, many of the readers might have pleasure in reciting Shakespearean verses or favorite poems. Moreover, one can quote the extracts in essays, articles and speeches as and when appropriate, resulting in joy of those who remember especially those of the same generation.

In Myanmar, sixth grade students must be able to recite multiplication table up to number 24, without the necessity of using a calculator. During a span of three decades, the writer had come across two male masseuses who recited the art of massaging

that includes where and how to press depending on the pain or disease of a client. These masseuses learnt those verses when they were young as if handed down from generation to generation, and did not forget till their old age. Even the herbalists used to recite certain formulae to prepare medicines. These verses were the wisdom of the ancient time although they may need to be improved in the light of new findings.

However, current generation of school children may not be eager to memorize and recite because of the abundance of electronic gadgets. So long as new knowledge is ciphered in those rhythmic verses, there is no harm in reciting; in fact, it is useful in storing knowledge and handing down from generation to generation. Reciting these verses does not necessarily impose the new generation to accept but to use as a starting point for further improvement.

However, modern version of reciting is publication on paper, recording in video tape, and putting in the web sites, achieving the same advantage of preserving knowledge at a trivial cost. Nevertheless, modern facilities like internet are still not accessible in many areas of the developing nations. In those agricultural societies, the old way of memorizing and reciting is still practical.

Another version of reciting is repetition or practice. There is a popular saying "Practice makes perfect". It is especially applicable in the case of learning to do such as martial arts, mechanical training and craftsmanship. Steiner (1999: p.217) claims that repetition learning is indispensable, and it can be used for the purpose of reinforced coding as well as for the construction of elaborations. Elaboration means adding new knowledge to an existing knowledge to bring about a higher level of knowledge.

Reciting is not exactly the same as the term recitation, for which a dictionary defines as "recital, usually from memory, of poetry or prose". According to Glathorn (1993: p.235), recitation is a rapid-firing quizzing, whose main purpose is to assess students' knowledge and to give them an opportunity to rehearse what they know. Recitation is mainly made up with recall questions. Normally, the assumption of a recitation is that there is one correct answer for each question. Unlike reciting that requires to complete at least one verse or paragraph, recitation as referred by Glathorn is made up of short questions and answers that need to recall memory.

Classification of eight functions based on steps

These eight functions could be classified according to their focus along the steps in learning. The main steps in learning process are namely: acquisition of knowledge, preserving and improvement of knowledge, and retrieving of knowledge. As a strong majority of those functions cover more than one step, it is not possible to make clear cut classification. For example, questioning and note-taking can be applicable in all steps of learning. In contrast, listening can be clearly classified under acquisition of knowledge, whereas examining and memorizing can be exclusively classified under preserving and improvement of knowledge. The writer makes an attempt to illustrate that classification in Table A.

Table A

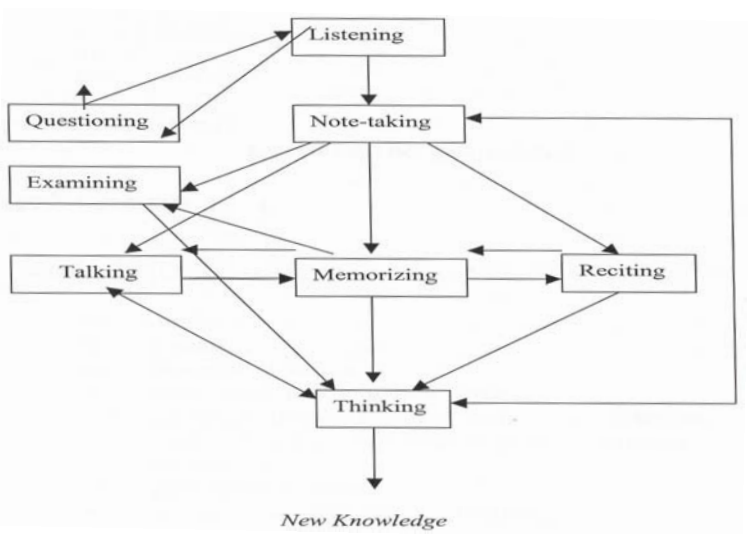
Classification of Eight Functions

Functions	Learning Steps		
	Acquisition	Preserving & Improvement	Retrieving
Listening	*		
Thinking		*	*
Questioning	*	*	*
Talking		*	*
Examining		*	
Note-taking	*	*	*
Memorizing		*	
Reciting		*	*

Relationship among eight functions

The relationship among eight functions does not follow strictly to the learning steps. Some functions definitely precede other functions, but there are reciprocal relations between other functions, especially reciting, memorizing, talking and thinking. Normally, learning process starts with listening, but in the case of clarification, questioning will in toprecede the listening. Note-taking follows listening but precedes reciting, memorizing, talking and examining. Thinking follows other functions and is supposed to be the last function before a new knowledge is finally established. These relationships are already discussed in each function. To comprehend the overall relationship, a diagram is shown in figure 5.

Figure: 5 Diagram Relationship among eight functions of learning



CONCLUSION

Now we can see that the eight functions of learning that have been discussed in this paper are still useful with some adaptations. As these functions were originated from ancient timesagricultural society, the use of paper and the art of printing was not known yet. The most probable object of writing scriptures was palm leaf requiring a slow and cumbersome impression. For this reason, reading and writing were not included in original functions of learning, but reading can be subsumed under listening and writing under talking. The most admirable functions are examining, thinking and questioning, among which thinking is the most difficult and effective function in learning. It is this function that rejects the view that oriental learning is rote learning.

Memorizing does not mean that the learner is ignorant of the text. Normally, the learner must understand a text before memorizing, and memorizing is easier when one understands the text. Moreover, ancient scholars stored their wisdom in verses that enable the learner to enjoy the pleasure of memorizing as well as reciting.

However, we need to adapt that way of learning to the realities of the modern world that is rapidly changing. In fact, the ways to adapt have already been discussed in respective functions. To make the reader clearer and more comprehensive, a table of eight functions with their respective adaptations in today's context is prepared and presented in Table B.

Table B Original Functions of Learning in Today's Context

Sr. No.	Original Functions of Learning	Functions in today's context
1.	Listening (accessing to others' knowledge)	Hearing, public hearing, reading, observing, participant-observation.
2.	Thinking (use of one's mental capacities for a purpose)	Imagining, conceptualization,inventing, creating, problem-solving,self-reflection.
3.	Questioning (asking for clarification)	Interviews, questionnaire survey, browsing internet and web sites.
4.	Talking (expressing one's idea or knowledge)	Broadcasting, quality circles, focus group discussion,brain storming session, writing.
5.	Examining (verifying the validity of knowledge)	Verifying facts and logic,checking authenticity, analyzing,assessment, exploring applicability
6.	Note-taking	Using mnemonic devices, reviewing and writing full sentence, reflection.
7.	Memorizing (remembering)	Concentrated listening and reading, recall, recapitulating.
8.	Reciting (retrieving and repetition)	Reproducing, memory-strengthening, handing down the knowledge, testing the knowledge, practice, publishing.

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