



Effect of topic summarization before starting the lectures on learning ability of Ayurveda students

Anantkumar Shekokar*, Dr Kanchan Borkar and Sanjivani Badhiya*****
S.V.N.H.T Ayurved Mahavidyalaya, Rahuri, Maharashtra

Abstract

The healthy education system requires efficient teaching along with friendly class room environment. This article presents effects of summarization before starting the lectures on learning ability of *Ayurveda* students. Study observed that the abstracting of a lecture at initial stage helps students to understand the key points and major outcomes of that particular lecture. The investigation found that most of the students urge for the topic summarization at the starting of lecture as well as at the end of the lecture. The topic summarization prepares students what is going to be discussed in classroom which helps to set mind for a particular topic. Study observed that this type of teaching improves learning ability of students since it boosts interest level and also helps students to memorize topic due to the repetition/revision of key notes.

Introduction

Ayurveda is an ancient school of medical science and has served millions of people for its therapeutic values. The evolution of *Ayurveda* system of education involves transformation of educational institutes from one form to another but its basic value resides same throughout centuries. Initially it was taught in *Vedic* institutions in the form of *Upaveda* of *Atharva Veda*. *Ayurveda* also taught in the *Gurukul* system of education.

The some aspects play vital role in education system of Ayurveda like knowledge of *Sanskrit* and English, practical exposure in clinical practice, proper infrastructure and a skilled teacher.

Recently it has been observed that the educational system in *Ayurveda* needs to be reformed suitably to compete with the modern system of medicine. The efforts will be able to produce well learned practitioners of *Ayurveda* science. The current education system of *Ayurveda* needs adaptation of some new teaching methodology to make Ayurveda education more prominent and efficient. Looking towards the importance of novel teaching methodology the present paper described an investigation approach to elaborate role of topic summarization at the initial stage of lecture on the learning ability of Ayurveda students. *Acharya Sushruta* described importance of teaching with topic summarization methodology. As per traditional text of Ayurveda *Ghatayedaatmana* means teacher (*Guru*) should repeat key points of topic until all students understands the topic, *Acharya Dalhana* also emphasized importance of sequential teaching. *Acharya Sushruta* also mentioned that *Guru* should split the *Shloka* into various sub parts such as; *Paad*, *Pada*, *Shabda*, *Sutra* which helps students to understand the topic deeply. The process of teaching and learning requires the great attention of students towards the ongoing and upcoming topics to correlate the successive educative discussion on same topic and it is believed that topic summarization helps students for the same. Study observed that learning ability of Ayurveda students improved significantly along with the memorization power¹⁻⁵.

Advantages of topic summarization before lecture³⁻⁷

- Students become familiar with the topic
- It helps to correlate with previous lecture
- Helps to memorizes key points of topic
- Improves attention towards the lecture
- Helps understanding of difficult topics due to the repetition of key points
- The thought process starts at the initial level which is essential to improve learning ability
- Create an outline of topic which helps in understanding.
- Correlate of key notes with each other
- Boosts retention power regarding delivered lecture
- Also beneficial for teacher to develop cascade/path of whole lecture at initial stage

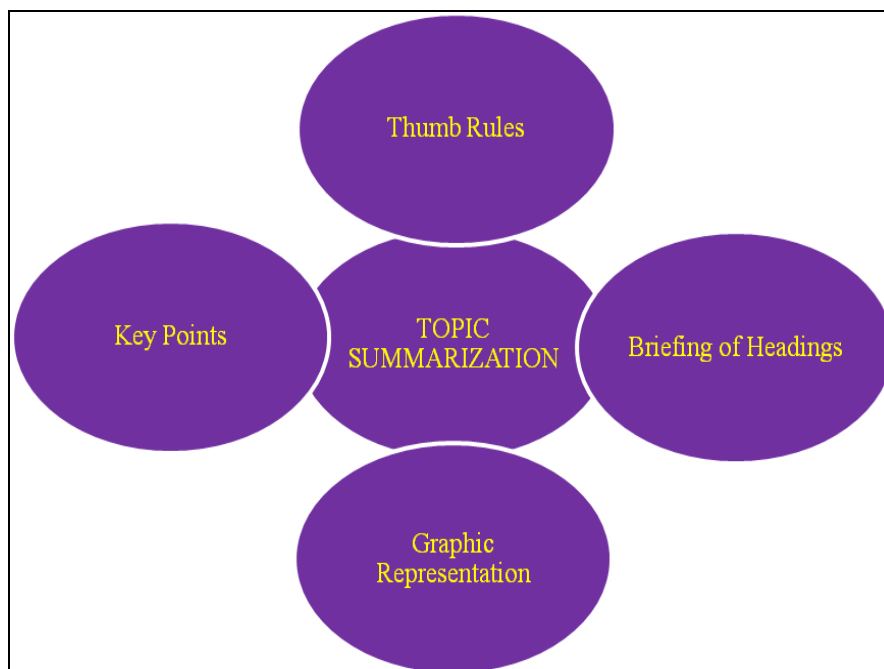


Figure 1. Steps of Topic Summarization.

This article presents an investigational study on effects of topic summarization before starting the lectures on learning ability of Ayurveda students:

Material and Methods

The present investigation was performed at S. V. N. H. T. *Ayurved* College in the department of *Shalya Tantra*, Rahuri Factory, Rahuri, Maharashtra, India. Students were divided into two groups (25 students in each group) randomly.

Group A; students were taught by normal routine teaching methodology without summarization of topic before lecture.

Group B: students taught by topic summarization methodology.

- The topic summarization done before starting of every lecture.
- Only 4-5 minutes were utilized for topic summarization.

Aim: To study effect of topic summarization before lecture on learning ability of *Ayurveda* students.

Selection of Subjects: The students were selected randomly for the study based on their attendance.

Inclusion criteria

- Both Male and Female students
- Age group between 17-25 years
- Students familiar with different languages such as English, Marathi and Hindi
- Regular Students having more than 70% attendance
- Physically/mentally compatible students.

Exclusion criteria

- Students do not wish to participate
- Age group between less than 17 and more than 25 years
- Students not efficient in languages (English, Marathi and Hindi)
- Irregular Students.

Assessment Criteria:

The effects on learning ability was assessed on the basis of following criteria as mentioned in

Table 1.**Table 1. Assessment of Teaching Efficacy Based on Evolutionary Parameters.**

S. No.	Assessment Criteria	Assessment Rank
1	Assignments based assessment	1- Acquire marks (70 % or more) 2- Acquire marks (60 % -70 %) 3- Acquire marks (45 % - 60 %) 4- Acquire marks (below 45 %)
2	Descriptive exam based assessment	
5	<i>Viva-voce</i>	
4	Overall feedback	Ranking (excellent/good/satisfactory/poor)

Statistical test

A paired t-test and significance test were applied for assessment of results by statistical analysis.

Results and Discussion

The results of study suggest that teaching and learning process improved significantly after the use of topic summarization methodology before starting lecture. Study concluded that the

learning efficacy of Ayurveda students affected by teaching process considering other factor like intellectual ability of students. Summarization of topic at starting creates outline regarding the topic to be taught and generate a confined framework for a whole lecture and helps students to focus his/her attention for a specific topic. Study found that diversion of mind was variable with the group. Students received lectures with topic summarization process were able to retain their focus for longer duration. Results revealed that more than 60 % of students acquire rank **1** in all techniques of assessment based on descriptive examination, assignments and *viva-voce* in group B; while in group A students acquire rank **1** in similar assessment criteria not exceeded than 45 %. Study also revealed that 58 % good ranking in feedback system in Group B as compared to 31 % in Group A. Study observed that most of the students wished that topic needs to be summarized before delivering lectures; this type of teaching reduces confusion which may be due to the fact that what will be going to be next and increase interest of students towards the content of lectures; all these factors together improved overall learning capacity of students. The optimize time for topic summarization was observed not more than 5 minutes. The best way of topic summarization was included use of key points, thumb rules, graphic presentation and briefing of headings. The learning ability of group B students were improved significantly and these results may be attributed to the fact that topic summarization while delivering lecture make students familiar with subject, correlate with previous and upcoming study, repetition of key notes improve retention power for longer duration enable students for questioning even at initial stage of lecture⁸⁻¹². The results of investigation mentioned in **Table 2**.

Table 2. Results of Study

S. No.	Assessment Criteria/ Evolutionary Parameters	X	SD	SE	p^*		
1	Assignments based assessment	0.623	0.433	0.084	< 0.001		
2	Descriptive exam based assessment	0.832	0.423	0.062	< 0.001		
3	<i>Viva-voce</i>	0.643	0.321	0.054	< 0.001		
4	Overall feedback	0.751	0.521	0.056	< 0.001		
% of Students Rank Wise in Both Group							
S. No.	Assessment Criteria/ Evolutionary Parameters	% of Students Group A			% of Students Group B		
		Rank 1	Rank 2	Rank 3	Rank 1	Rank 2	Rank 3
1	Assignments based assessment	36	18	46	61	20	19
2	Descriptive exam based assessment	39	22	39	60	24	16
3	<i>Viva-voce</i>	44	20	36	65	21	14
*All results were found to be significant.							

Study also observed few disadvantages of topic summarization before lecture such as; time consumption, students may become habitual, not required for easy and concise topic and if two different topics have to be covered in one lecture then not possible to summarize both topics in a single lecture.

Conclusion

The research investigations on teaching and learning process revealed that teaching methodology must be modified time to time and use of innovative and logical teaching affects student's grasping power significantly; considering all these facts, a research investigation was attempted to explore the role of "topic summarization" before delivering lecture on learning ability of

Ayurveda students and study found significant results. Finally study conceded that a brief “summarization of topic” is very essential before and even after the lecture to improve teaching and learning process especially in medical education.

***Prof. and H.O.D Dept. of Shalya Tantra, S.V.N.H.T Ayurved Mahavidyalaya,
Rahuri Factory, Maharashtra, India**

****Associate Prof Dept of Shalya Tantra, S.V.N.H.T Ayurved Mahavidyalaya**

*****P. G. Scholar, Dept of Shalya Tantra, S.V.N.H.T Ayurved Mahavidyalaya**

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