

## Effectiveness of Declaring Specific Learning Objectives (SLO) on learning of Ayurvedic Medical Students

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### Abstract

Specific learning objectives (SLO) is one of the most effective and yet easiest tool to enhance and explicit the teaching-learning process. It enables the facilitator to make the process of teaching and learning more and more student oriented and also imparts unifacility to the delivery of the subject. Setting of SLO also helps the teacher to guide themselves to deliver the topic more precisely without leaving any disarray. Current project was under taken to assess the efficacy of “defining specific learning objective” on final level of BAMS graduates. Participants were divided into two groups prior to the teaching session and one group was exposed to SLO and the other was not. Following this, both the groups were simultaneously exposed to pre-decided portion from their syllabus. Objective test based on the topic taught was conducted and response against predesigned questionnaire was taken from the participants. Data so obtained was statistically analyzed.

**Keywords:** Objective, Subjective.

### Introduction

It is said that “teaching is an art while learning is a skill”. The process of teaching and learning goes hand-in-hand and hence it can be stated that the process of teaching and learning is totally interdependent and either can affect the process.

Cohen noticed that learning can be made more effective by associating the learning objectives with the teaching process.<sup>(1)</sup> Specific learning objective (SLO), in other words, is the pathway that leads the learner and the facilitator to achieve their respective goals. It also acts as a guiding tool that helps the students to know what to expect from the facilitator and also to plan their studies more precisely.<sup>(2)</sup> This also enables the teachers to make the delivery of their teaching sessions more and more student oriented. Statement of learning objective usually contains a verb (action) and an object (usually a noun).<sup>(3)</sup>

The content of the Ayurved syllabus, so far published is not categorized under the headings like must to know, desirable to know and good to know. Ayurvedic syllabus designed, so far, by the authorities is not yet well organized from teaching-learning point of view. Number of opinions and interpretations, which not only vary but many a times are contradictory to each other, are imposed on the brains of students. On this basis, we can say that even the assessment done is not proper, as the questionnaire designed is not based on the “must to know” area of the syllabus. Also, the practice of defining specific learning objectives prior to lectures is not very commonly used in most of the Ayurvedic colleges.

In order to make the teaching learning process of Ayurvedic science more effective and student oriented above educational research project was undertaken.

### Context of the study

Specific learning objectives is one of the most effective and yet easiest tool to enhance and explicit the teaching-learning process. It enables the facilitator to make the process of teaching and learning more and more student oriented and also imparts unifacility to the delivery of the subject. Setting of specific learning objectives also helps the teacher to guide themselves to deliver the topic more precisely without leaving any disarray. Adopting this practice of defining the specific learning objectives, will also facilitates the students to plan their studies more appropriately not only from examination point of view but also will aid them to determine the applied aspect of the concerned topic.

### Overall goal

To assess, how declaration of Specific learning objectives affects teaching-learning method in Ayurved medicine.

### Specific objectives

1. To determine, how declaring of SLO affects teaching-learning process in Ayurved medicine.
2. To collect & assess the students feedback about this method.

### Materials & Methods

A study was conducted on final year students of BAMS, at C.S.M.S.S. Ayurved College, Aurangabad. A written consent was obtained from the participants. Initially, students participating were randomly selected and divided into two groups, namely Group A and Group B. In a prescheduled session, all participants were made to sit in two distinct groups. Participants of Group B were sent out of the classroom for adequate time, during which the students of Group A were

exposed to the predesigned SLO on the topic of Swine Flu. Thereafter, lecture on the said topic was delivered simultaneously to the participants of both groups. A specially designed questionnaire was used for the objective test (Multiple Choice Questions) which was conducted immediately after the lecture. Utmost precautions were taken to avoid interaction between the participants. Data so obtained was subjected to statistical analysis.

A feedback form was distributed to all the participants of Group A, who were taught with

declaring the SLO. In all seven statements were designed and the participants were ask whether they agree or disagree with those statement. The data so obtained is presented in the form of charts and tables.

### Results

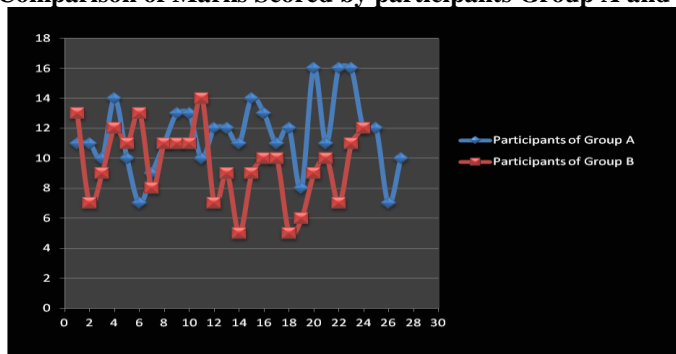
51 students of final year B.A.M.S. participated in the objective test (MCQ) and 27 students participated in the feedback session. The results obtained are presented in the form of charts and tables.

**Table 1: Marks Obtained by the Participants in Objective Test (MCQ)**

Participants of Group A (exposed to SLO)	Marks Scored	Participants of Group B (not exposed to SLO)	Marks Scored
A1	11	B1	13
A2	11	B2	07
A3	10	B3	09
A4	14	B4	12
A5	10	B5	11
A6	07	B6	13
A7	09	B7	08
A8	11	B8	11
A9	13	B9	11
A10	13	B10	11
A11	10	B11	14
A12	12	B12	07
A13	12	B13	09
A14	11	B14	05
A15	14	B15	09
A16	13	B16	10
A17	11	B17	10
A18	12	B18	05
A19	08	B19	06
A20	16	B20	09
A21	11	B21	10
A22	16	B22	07
A23	16	B23	11
A24	12	B24	12
A25	12		
A26	07		
A27	10		

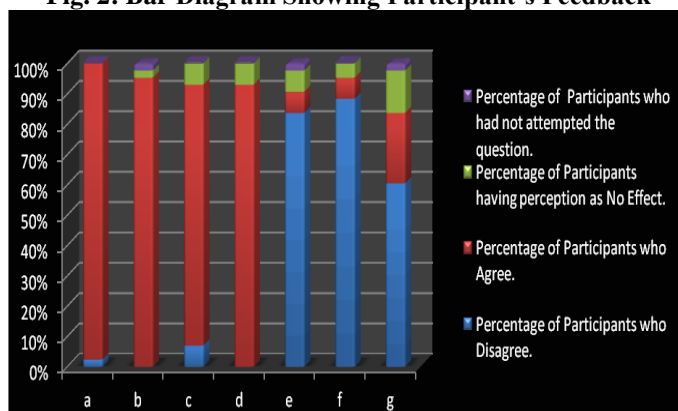
Marks scored are out of -17.

**Fig. 1: Comparison of Marks Scored by participants Group A and Group B**



**Table 2: Participant's Response Regarding SLO**

Participant's Response about Declaring Specific Learning Objective	Response			
	Participants who Disagree (%)	Participants who Agree (%)	No. Effect (%)	Not attempted the question (%)
I appreciate the teaching method with declaring specific learning objectives.	1 (3.70 %)	26 (96.29 %)	00	00
I understood the topic better by this method.	00	25 (92.59 %)	01 (3.70 %)	01 (3.70 %)
The method should be encouraged in all other subject too.	01 (3.70%)	24 (88.88 %)	02 (7.40 %)	00
This method allowed me to have increased concentration on teaching.	00	24 (88.88 %)	03 (11.11 %)	00
The method did not have much effect on my learning process.	24 (88.88 %)	01 (3.70 %)	02 (7.40 %)	00
I am more comfortable with the routine method.	25 (92.59 %)	01 (3.70 %)	01 (3.70 %)	00
Method more focused on passing the examinations & doesn't help to get into the topic in depth.	20 (74.07 %)	05 (18.51%)	02 (7.40 %)	00

**Fig. 2: Bar Diagram Showing Participant's Feedback**

- I appreciate the teaching method with declaring specific learning objectives.
  - I understood the topic better by this method.
  - The method should be encouraged in all other subjects too.
  - This method allowed me to have increased concentration on learning.
  - The method did not have much effect on my learning process.
  - I am more comfortable with the routine method.
  - Method is more focused on passing the examination & doesn't help to get into the topic in depth.
- In group A, 85% of participants scored marks above 50% while in group B, 54% of participants scored marks above 50%.
  - In group A, only 11.1% of participants scored marks less than 50%, while in group B, 29% of students failed to scored marks above 50%.

#### Feedback Session

- 96.29% of participants appreciated the teaching method with declaration of SLO.
- 92.59% of participants agreed that they understood the topic better by this method.
- 86% of the participants think that this method should be encouraged in all other subjects.
- 88.88 % of the participants stated that this method of declaration of SLO helped them to have increased concentration on teaching.
- In all 01 participant (3.7%) stated that this method had not affected much on the process of learning and are more comfortable with the routine method.

#### Discussion & Conclusion

##### Objective Test (MCQ)

- In group A, 30% of participants scored distinction while in group B 12.5% of participants scored distinction.

6. 05 participants (18.51 %) think that this method is more focused on passing the examination and doesn't help to get into the topic in depth.

The data was statistically analyzed by using unpaired 't' test and the value of 't' was found to 2.86, which is significant at the 0.005% level of confidence (P=0.0061).

**Table 3: Statistical Analysis**

Group	Group A	Group B
Mean	11.56	9.58
SD	2.41	2.50
SEM	0.46	0.51
N	27	24
P	0.0061	

### Summary

Ayurved medicine is a vast data base having ancient as well as contemporary text and views. In order to simplify the understanding of this philosophical medical science, the tools of teaching and learning methodology should be used very effectively. Declaration of specific learning objective is the simplest technique to enhance the effectiveness of the teaching and learning methodology. This will enable to have adequate and appropriate content in teaching. It will also help to choose the necessary technique of instruction and to have an accurate technique of assessment.

Final year students were randomly divided in two groups. In a scheduled lecture, Group A participants were exposed to SLO, while the group B participants were not. Both the groups were asked to sit distinctly in order to avoid any verbal communication. Common topic was taught to both the groups simultaneously followed by an objective test based on the topic taught. Data so obtained was subjected for statistical analysis. Similarly participant's response was called by using a structured feedback forms. Data was analyzed and conclusions were drawn.

Observations based on this study indicated that declaration of SLO has enhanced the learning amongst the participants of group A, who were exposed to SLO.

Rigorous study is recommended which should include participants and research workers from various levels of curriculum.

### References

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