

A comparative study of programmed learning and supervised assignment learning in relation to particular variable

Dr. Bhavanaben Ashokkumar Modi

Assistant Professor, B.D. Shah College of Education, Modasa, Gujarat, India

Abstract

Programmed learning and supervised assignment learning are the techniques which enhance the achievement level of the students. In this present study the investigator has decided following statement for her research work 'A Comparative Study of Programmed Learning and Supervised Assignment Learning in Relation to Particular Variables'. The objectives of the study were as under: 1. To study interrelationship between programmed learning and supervised assignment learning. 2. To study interrelationship between programmed learning and supervised assignment learning by viewing gender. 3. To study interrelationship between programmed learning and supervised assignment learning by viewing achievement scores. 4. To prepare the learning materials and achievement test and applied it on the sample.

According to the objectives of the study 60 students were taken as sample from which 30 were taken for programmed Learning and 30 were taken for Supervised Assignment Learning. Experimental design considered two equivalent group designs, the post test only. Data was analyzed by using statistical techniques like Mean, standard deviation, Quartile deviation, Kurtosis, Skewness, Error of standard deviation, Error of Kurtosis, Error of Skewness, 't' and 'p' Values. The major findings of the study were as under: (1) The significant difference is seen between the mean scores of achievement test gained on programmed learning and supervised assignment learning by the students. It can be said that the effect is high of programmed learning. (2) The significant difference is seen between the mean scores of achievement test gained on programmed learning and supervised assignment learning by girls. It can be said that the effect is high of programmed learning on girls. (3) The significant difference is seen between the mean scores of achievement test gained on programmed learning and supervised assignment learning on boys. So it can be said that the effect is high of programmed learning on boys. (4) The significant difference is seen at the end between the mean scores of achievement test gained on programmed learning by girls and boys.

Keywords: linear programmed learning, supervised assignment learning, achievement test

1. Introduction: Rationale

Programmed learning is the way of learning by which each and every student can learn actively in the classroom and the achievement of all the students can be increased. Supervised assignment learning is also student-centered learning in which students remain active under the supervision of particular teacher. Nowadays due to the development of high-speed electronic computers, data processing techniques has brought about many recent advances in student-centered learning. Linear programming and supervised assignment learning are the techniques which are now widely used in schools for student learning.

So the investigator has selected two self-learning methods and has tried to know its effects on students in the class room by viewing their achievement scores on achievement test.

2. Objectives of the study

1. To study interrelationship between programmed learning and supervised assignment learning on achievement score.
2. To study interrelationship between programmed learning and supervised assignment learning on achievement scores by viewing gender.

3. To prepare the learning materials and achievement test and applied it on the sample.

3. The Variables

1. Programmed learning --- Independent variable
2. Supervised assignment learning --- Independent variable
3. Achievement scores of Test -Dependent variable
4. Boys & Girls (Gender)--- Moderator variable

4. Hypotheses

1. There will be no significant difference between the mean scores of achievement test gained by programmed learning and supervised assignment learning.
2. There will be no significant difference between the mean scores of achievement test gained by programmed learning and supervised assignment learning on girls.
3. There will be no significant difference between the mean scores of programmed learning and supervised assignment learning's achievement scores on boys.

5. Tools Used

For the collection of data of study, the following tools

were developed by the investigator.

1. Programmed learning materials
2. Supervised assignment learning materials
3. Achievement Test

6. Sample

For the collection of data, the following sample was adapted by the investigator.

Table 1

Variable	Sub variable	No.	Total
Area(A)	Programmed learning (a1)	30	60
	supervised assignment learning (a2)	30	
Sex (B)	Programmed learning (Girls) (b1)	15	30
	supervised assignment learning(Girls) (b2)	15	
Sex (C)	Programmed learning (Boys) (c1)	15	30
	supervised assignment learning(Boys) (c2)	15	

7. Research Design

Investigator has selected research design as under:

Table 2

Variable	Sub variable
Area(A)	Programmed learning (a1)
	supervised assignment learning (a2)
Sex (B)	Programmed learning (Girls) (b1)
	supervised assignment learning(Girls) (b2)
Sex (C)	Programmed learning (Boys) (c1)
	supervised assignment learning(Boys) (c2)

8. Procedure

Investigator has made procedure as under

- The Investigator has decided for clarifying its abstracts through self learning method and its effect on innovative practices in the classroom instruction.
- The Investigator has seen the problem especially in programmed learning and supervised assignment learning on achievement scores.
- The Investigator has selected Girls & Boys from

Sarvajanik School of Mehsana city from the Gujarat state and has got data by the self-made tests.

- The Investigator has calculated the data as per research design by using statistical techniques with the help of SPSS software.
- The Investigator has tested hypotheses and noted the conclusions.

9. Statistical method and technique

Mean, standard deviation, Quartile deviation, Kurtosis, Skewness, Error of standard deviation, Error of Kurtosis, Error of Skewness, 't' and 'p' Values were calculated by investigator.

10. Analysis of Data

Table and Fig: Value of central tendency, dispersion and its error of achievement test on programmed learning and supervised assignment learning were analyzed. Variables such as (A) Learning: (B) Girls (C) Boys test calculation is shown as under table.

Table 3

Variable	Learning		Girls		Boys	
	Pro. L	Sup. A.L	Pro. L	Sup. A.L	Pro. L	Sup. A.L
l	2	3	4	5	6	7
M	8.00	4.36	7.80	4.13	8.20	4.60
S.D.	3.43	2.90	3.38	3.18	3.59	2.69
Sk	0.64	0.58	0.62	1.15	0.71	-0.17
Ku	-0.34	-0.08	-0.35	1.23	-0.08	-1.28
Er.std	0.63	0.53	0.58	0.58	0.58	0.58
Er.sk	0.43	0.43	0.87	0.82	0.93	0.70
Er.ku	0.83	0.83	1.12	1.12	1.12	1.12
N	30	30	15	15	15	15

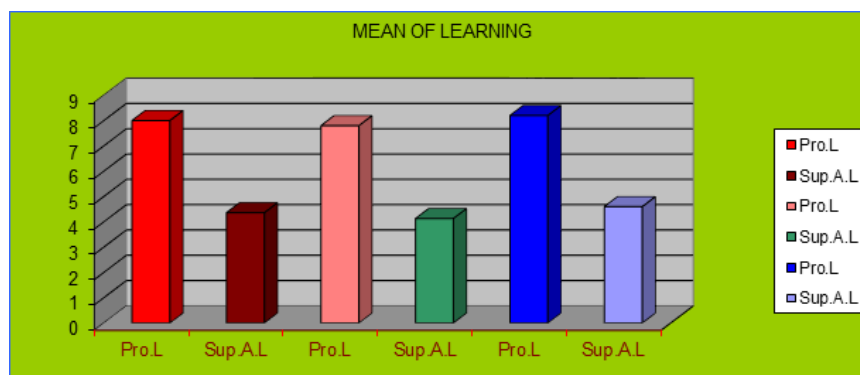


Fig 1

1. Table 3 & Fig no.1 (columns 2 & 3) indicates that the mean score of achievement test gained by programmed learning and supervised assignment learning are 8.00 and 4.36. It indicates skewness value 0.64 and 0.58 whereas kurtosis value -0.34 and -0.08. So it can be said that the mean scores of programmed learning is high. Also it can be said that both the value of skewness are plus and the kurtosis of programmed learning is platy but supervised assignment learning is lepto.
2. Table 3 & Fig no.1 (columns 4 & 5) indicates that the mean scores of achievement test gained by programmed learning and supervised assignment learning on Girls are 7.80 and 4.13 It indicates skewness value 0.62 and 1.15 whereas kurtosis value are -0.35 and 1.23. So it can be said that the mean

scores of achievement test gained by programmed learning on Girls is high. Also it can be said that the value of skewness are plus and the kurtosis of both are platy

3. Table 3 & Fig no.1 (columns 6 & 7) indicates that the mean scores of achievement test gained by programmed learning and supervised assignment learning on boys are 8.2 and 4.6. It indicates skewness value 0.71 and -0.17 whereas kurtosis values are -0.08 and -1.28. So it can be said that the mean scores of achievement test gained by programmed learning is high. Also it can be said that the value of skewness of programmed learning is plus but supervised assignment learning on boys is Minus and the kurtosis of learning by programmed learning is lepto kurtosis of supervised assignment learning of boys is platy.

11. Testing of Hypotheses

Table 4

S. No	Hypothesis	Df.	Value 't'	Value 'p'	Significance	Acceptance
1	There will be no significant difference between the mean scores of achievement test gained by programmed learning and supervised assignment learning.	29	4.99	2.6	Yes	No
2	There will be no significant difference between the mean scores of achievement test gained by programmed learning and supervised assignment learning on girls.	14	3.87	0.00	Yes	No
3	There will be no significant difference between the mean scores of achievement test gained by programmed learning and supervised assignment learning on boys.	14	3.17	0.01	Yes	No

12. Summary

The findings of the study are as under:

1. The significant difference is seen between the mean scores of achievement test gained on programmed learning and supervised assignment learning by the students. It can be said that the effect is high of programmed learning.
2. The significant difference is seen between the mean scores of achievement test gained on programmed learning and supervised assignment learning by girls. It can be said that the effect is high of programmed learning on girls.
3. The significant difference is seen between the mean scores of achievement test gained on programmed learning and supervised assignment learning on boys. So it can be said that the effect is high of programmed learning on boys.
4. The significant difference is seen at the end between the mean scores of achievement test gained on programmed learning by girls and boys.

So programmed learning is so much important, helpful for students and also should be accepted in school Education for learning.

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