Relevance of Linear Programme in Higher Education in Ahmedabad City

GUNJAN SHAH
Principal,
Shri Swaminarayan Gurukul B.Ed. College, Kalol
Dist. Gandhinagar Gujarat (India)

Abstract:
In the fast developing country like ours there is the significant decrease in government funding available in the äreä of post-secondary and higher education day by day.

At the same time, educational research has expanded our understanding of how individuals learn, information technology has become a tool' for learning, hence our roles as learners become as essentia! as any other aspect of our lives. Here, in this small piece research work the investigators want to know the effects of learning through Linear Programmed in higher education in Ahmedabad city in relation to achievement, area and sex.

Keywords: *Achievement, Linear Programme, Instruction*

1. Introduction

Linear Programming is a Mathematical and Operations Research technique, used in administrative and economic planning to maximize the linear functions of a large number of variables, subject to certain constraints (see Algebra Functions; Mathematics). The development of high-speed electronic Computers and data-processing techniques has brought about many recent advances in linear programming and the technique is now widely, used in industrial and military operations.

Linear programming is basically used to find a set of values, chosen from a prescribed set of numbers, which will maximize or minimize a given polynomial form (see Binomial). This is illustrated by the followvving example of a particular kind of problern and a method of solution. A manufacturer makes two varieties viz VI and V2, of an article having operations via: cutting, assembling, and finishing; the manufacturer knows that as many articles as produced can be)ld. Variety VI takes 25 minutes to cut, 60 minutes to assemble and 68 minutes to fmish; it yields Rs.30 profit, Variety V2 takes 75 minutes to cut, 60 minutes to assemble and 34 minutes to finish; it yields Rs, 40 profits. Not more than 450 minutes of cutting time, 480 minutes of assembly time and 476 minutes of finishing time are available per day. How many articles of each variety should be manufactured per day to maximize profit?

The profit can be maximized by using the equation p - 30x + 40y where p is profit. For x»3 and y-5 the manufacturer will earn a maximum profit (of Rs.290). So if 3 articles of variety VI and 5 of variety V2 are made per day than the manufacturer may earn maximum profit. Any other quantities of the two variet-ies, within the constraints of the time limitations, will yield a smaller profit. In the world of globalization and Hberalization, the economic scenario of every country is changing remarkably to sustain die growth and development of the nation. Due this fundamental

shift, the new economical constraints are created, which compel institutions of higher education for changes. In this changing scenario the intuitions of higher educations have to think differently to cope up the challenges in the nature of work, new job responsibilities, careers of the students and their personality.

2.Defination of the Terms

Linear Programme means the reading material, which is prepared by the teacher and delivered to students. The student read the instruction and information of study matenals and writes the answers of the questions and passes the e one by one under the supervision of teacher.

3. Objectives of the Study

1. To study interrelationship among Rural and Urban Area for Learning through Linear Programme of College Student.
2. To study interrelationship among Girls and Boys for Learning through Linear Programme of College Student.
3. To study interrelationship among Achievement test scores and Learning through Linear Programme test scores of College Student.

4. Variables of the Study

4.1 Independent Variables

a) Urban and Rural [Area]
b) Girl and Boy [Sex]
c) Achievement test scores

4.1 Independent Variables

a) Learning through Linear Programmed test scores.

5. Hypotheses

1. There is no signiflcance difference between the mean of Rural and Urban area for Learning through Linear Programme of College Student.
2. There is no signiflcance difference between the mean of Girl and Boy äreä for jfcarning through Linear Programme of College Student.
3. There is no signiflcance difference between the mean of Echeivement test l scores and Learning through Linear Programme test scores of College Student.

6. Research tools of the Study

For the collection of data of study, the following tools, were- adapted by the researcher.

1. Linear Programme test; this tool is developed by N. B. Gajjar
2. Linear Programme : This tool is developed by Pri. K.M. Patel & Dr. N.T. Chauhan.
3. Echeivement test; Prof. J. M. Kadiya.

7. Sample of the Study

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

Variable	Sub Variable	No.	Total
Area	Rural	25	100
	Urban	75	
Sex	Girl	32	100
	Boy	68	
Test	Liiiear Protest scores	100	200
	Achievement test scores C2	100	

8. Analysis of the Data

Table: Values of central tendency, dispersion and it's error of AchievementTest md Learning through Linear Programme of F.YB.Sc Physics students, variables such as [A]Area, [B] Sex & [C] Test are as under.

Table-1

Parameters	Area		Sex		Test	
	Urban	**Rural**	**Girl**	**Boy**	**Lin. Pro.**	**Achievement**
Mean	4.4	4.59	4.5	4.57	4.54	2.46
S. D.	0.96	.72	.80	0.76	0.78	0.75
Er. Std.	0.19	0.08	0.14	0.09	0.07	0.08

9. Findings

The researcher has carried out the following findings.

1. It clearly indicates the significant effect of learning through Linear Programme on the mean of F. Y. B.Se -students of rural and Urban Area. Hence it can be said that the effect is high on Rural Area as compared to Urban.
2. There Is no significant effect of Learnmg through LinearProgramme on the-mean of Girls and Boys. Hence it can be said that the effect is normal on the variable-sex.
3. There is significant difference betvveen the mean of Traditional Achievement test scores and learning through Linear Programme test scores. Hence it can be said that the effect is high in learning through Linear Programme as compared te Traditiona! Achievement test scores.

From above flndings it is clear that the self learning and self evaluation is better for the students of Higher Education, so learning through Linear Programme can be implemented for the Higher Education. By adopting this simple method of Self Learning can help the students to become a part of Self Learning Society in the Self Learning World.

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