

---

---

CHAPTER - VI

TEACHER PUPIL RATIO  
An Analysis

---

---

## I

INTRODUCTION

Effective management of a class is a very important factor which requires a normal teacher-pupil ratio at the schools. Higher teacher-pupil ratio (TPR) impedes the students to get individual attention from teachers and it becomes also difficult for the teachers to take due care of all the students in a class. On the other hand, a small teacher-pupil ratio facilitates proper individual attention on the part of the teachers. But a developed country can afford a smaller TPR while in a country like India, a smaller TPR would be a luxury. Hence, an attempt has to be made to find out a

feasible TPR which does not affect the students' interest and is not costly on the part of the State - as both the factors are equally important.

In India, there is a strong difference of opinion as to what should be the optimum TPR at the different stages of school education. The Education Commission of India (1964-66), visualised the TPR of 1:40 per class would be an ideal ratio for schools. Recently the Yash Pal Committee also recommended the same ratio.

The Fourth All India Educational Survey which was held in 1978, noted that at the primary stage the all India average was 41 pupils per teacher in a class, at the middle stage it was 1:25 and at the secondary/higher secondary stage all India average was 1:18. The latest figures<sup>1</sup> available as to TPR in the various States at various stages of school education is as under :

Table-I  
Statewise Teacher-Pupil Ratios in India(1984-85)

Sl.No.	State/Union Territory	Primary Stage	Middle Stage	Secondary/ High School Stage	Hr.Second-ary stage
(1)	(2)	(3)	(4)	(5)	(6)
1.	Andhra. Pradesh	52	41	32	28
2.	Assam	40	24	29	23
3.	Bihar	46	39	33	25

Contd..

Table-I Contd...

(1)	(2)	(3)	(4)	(5)	(6)
4.	Gujrat	41	39	24	27
5.	Haryana	44	35	33	28
6.	Himachal Pradesh	37	17	30	25
7.	Jammu & Kashmir	29	22	20	21
8.	Kerala	32	32	28	26
9.	Karnataka	45	52	36	24
10.	Madhya Pradesh	43	30	-	26
11.	Maharashtra	39	37	30	34
12.	Manipur	18	17	24	17
13.	Meghalaya	30	16	26	-
14.	Nagaland	22	20	24	-
15.	Orissa	37	26	21	40
16.	Punjab	38	16	22	26
17.	Rajasthan	47	32	20	24
18.	Sikkim	17	20	22	16
19.	Tamil Nadu	42	42	28	27
20.	Tripura	39	29	28	21
21.	Uttar Pradesh	45	28	34	-
22.	West Bengal	37	45	40	30
23.	A. & N. Islands	21	21	20	21
24.	Arunachal Pradesh	44	24	10	21
25.	Chandigarh	20	30	24	19
26.	Dadra & Nagar Haveli	40	32	25	19
27.	Delhi	34	24	24	21
28.	Goa, Daman & Diu	28	32	28	12
29.	Lakshadweep	28	18	19	18
30.	Mizoram	26	13	15	-
31.	Pondichery	28	30	26	32
ALL INDIA		41	36	30	27

Source : Fourth All-India Educational Survey - Some  
Statistics on School Education; 1980; NCERT.

In West Bengal, an integrated high school (with classes V to X) should have on its roll a minimum number of 250 students. In the case of an integrated higher secondary school (with classes V to XI), the minimum number should be 300. The maximum number of students permissible for enrolment in a high school is 750 and that in a higher secondary school with one stream, 850 and with more than one stream, 1000 and not less than 20% of the pupils shall be in the two or three top classes, as the case may be. Previously the optimum TPR was 1:30/1:25, now it is 1:45 or even more.

## II

### RELATED STUDIES

The latest comprehensive study available in this area is by Singhal<sup>2</sup>. Singhal's study covered 20 States and 1 Union Territory of India by taking one district each from 58 National Sample Survey regions. His study revealed that not only there are wide variations among the States and UTs. in respect of norms of TPRs prescribed by them, but he witnessed that there are also wide gaps between the norms prescribed and norms actually followed. There are also large variations in class-size and teachers' work load as well.

Apart from the Singhal's study, there are hardly any researches in the area of class-size and determination of

optimum TPRs for school while there are a few researches available in the area of teaching and teacher behaviour. They are Reddy and Joshi<sup>3</sup>, Goyal<sup>4</sup>, Adaval<sup>5</sup>, Mehta<sup>6</sup>, Sharma<sup>7</sup>, Padma<sup>8</sup> Roka<sup>9</sup> and Jangira<sup>10</sup>.

### III

#### ANALYSIS OF FINDINGS

This chapter attempts to review the present roll strength and the TPRs in the schools included in our sample (as introduced in Chapter : I) and analyses the findings.

In the Memo. No. 2725 Edn(G)/10 R-2/60 dated 26.7.61 the Govt. relaxed the limit of maximum enrolment to the following extent -

- i. For Class X High Schools(V-X) - 750 students.
- ii. Higher Secondary Schools with one course only - 850 students.
- iii. Higher Secondary Schools with two or more diversified Courses - 1000 students.

Enrolment in excess of the limit will not be taken into account for the purpose of recurring grants-in-aid.

Table-II gives the roll strength in the sampled schools and compares the same with the maximum permissible <sup>limit</sup> and

the extent of difference (i.e. whether over-enrolment or under-enrolment). It can be observed from the said table, that most of the schools (55%) have student enrolment above the maximum capacity, while 10% have enrolment just equal to its maximum permissible limit. On the other hand, there are schools (30%) who have enrolment less than their permissible limit. The schools which have excess enrolment (in some cases even it is double the actual capacity) are maintaining themselves with the same resources as admissible on the basis of maximum limit of students. This disparity can not be advocated as some schools (mostly those schools which are situated within the towns) are running with adequate resources while others (those schools which are situated in the rural areas) are overburdened. This situation thus demands opening of new schools in the rural areas and it should be kept in mind that there should not be concentration in the towns.

Further, from Table III, we get a picture of the TPR in the schools, and it can be observed that though most of the schools (75% of our sample) the TPR is smaller, but surprisingly, two schools have TPR of 1:100 and 1:83 which is an absurd situation. This disparity could be voided either through recruitment of new teachers or by transfer from schools who are in a much better position. However, we do not have any transfer policy for school teachers. many problems

could be avoided if a transfer policy could be introduced for school teachers which will enable to transfer the extra fat from the fatty ones to them who are thin.

We have also made an attempt to estimate the student strength on the basis of the optimum TPR (Say 1:50, as this seems to be a rational TPR in view of the present environment). The estimated number of students were then compared with the actual strength (Table : IV) and we find that if 1:50 is accepted to be the rational optimum TPR for West Bengal Schools, then the student strength estimated on that basis (i.e. in relation to the number of teachers), show that majority of the schools in our sample (80%) are running below their capacity, 10% of them are running at par with their capacity and 10% of them are running much above their capacity.

We have also estimated the number of teachers required on the basis of the actual student strength, taking into account the optimum TPR of 1:50. Table-V thus helps us to identify the extent of shortage of teaching staff or overmanning. It can be witnessed that, taking into account an uniform optimum TPR of 1:50 estimated teacher strength is higher than the actual strength in most cases. We observed that 60% of the sampled schools are overmanned in terms of teaching staff, while in 30% of the cases it is marginal. 10%

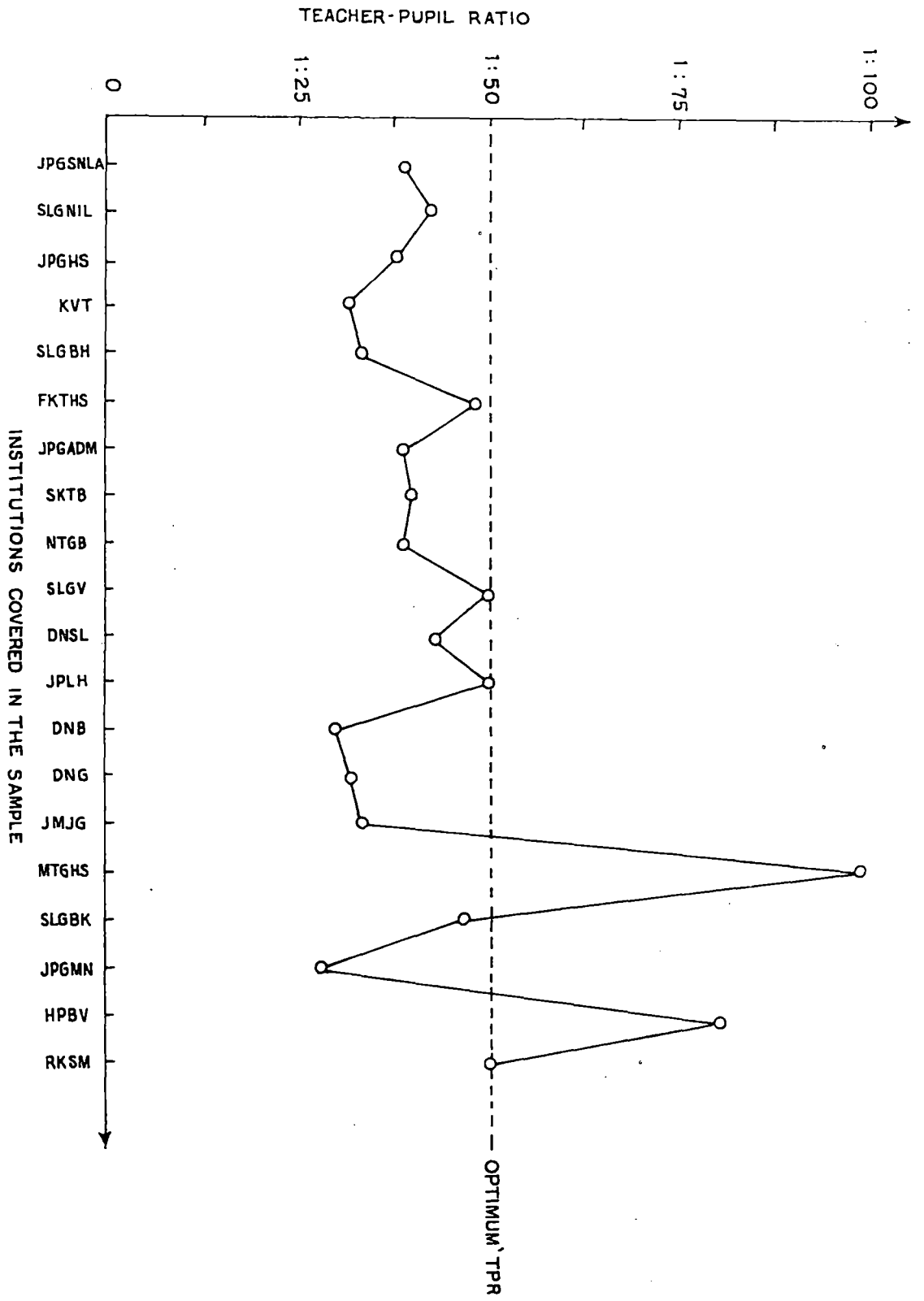


Fig. 1.

of the schools are highly undermanned in terms of teaching staff, in one school the actual number of teaching staff is half of the estimated teaching staff (estimated on the basis of TPR of 1 : 50).

Thus, we come across disparities as to number of teachers in relation to the student strength. While the overall picture is not a gloomy one, however, the hardship the teachers and the students of a few schools are passing through (due to shortage of teaching staff, excess student enrolment over and above the maximum limit) is hardly justifiable and the sufferings are more in case of schools situated in rural areas than those which are advantageously located within or nearer to the towns.

Table: II

Sl.No.	Abbreviated School	Standard	Stream/ Course	Actual Std. strength	Maximum limit	Extent of diff.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	JPGSNLA	HS	AS	1200	1000	(-) 200
2.	SLGNIL	HS	ASC	1700	1000	(-) 700
3.	JPGHS	HS	AS	1000	1000	-
4.	KVT	H	-	400	-	-
5.	SLGBH	HS	ASC	1400	1000	(-) 400

Contd....

(1)	(2)	(3)	(4)	(5)	(6)	(7)
6.	FKTHS	HS	ASC	2000	1000	(-)1000
7.	JPGADM	H	-	650	750	(+) 100
8.	SKTB	HS	ASC	1100	1000	(-) 100
9.	NTGB	HS	ASC	1000	1000	-
10.	SLGV	H	-	900	750	(-) 150
11.	DNSL	HS	AG	900	850	(-) 50
12.	JPLH	HS	AS	1092	1000	(-) 92
13.	DNB	H	-	687	750	(+) 63
14.	DNG	H	-	560	750	(+) 190
15.	JMJG	JH	-	200	-	-
16.	MTGHS	H	-	1600	750	(-) 850
17.	SLGBK	H	-	875	750	(-) 125
18.	JPGMN	H	-	350	750	(+) 400
19.	HPBV	H	-	750	750	-
20.	RKSM	H	-	1000	750	(-) 250

Notes : 'H' stands for High, 'HS' stands for Higher Secondary  
 'JH' stands for Junior High, 'A' stands for Arts,  
 'S' for Science and 'C' for Commerce and 'AG' for  
 Agriculture.

'+' indicates under enrolment.

'-' indicates over enrolment.

Actual Student strength in case of some schools are in  
 approximate figures.

Abbreviations used for school names appear at the end  
 of the chapter.

Table-III

Sl.No.	Abbreviated School Name	Actual TPR	Difference from Optimum TPR
1.	JPGSNLA	1 : 39	+ 1:11
2.	SLGNIL	1 : 42	+ 1:08
3.	JPGHS	1 : 38	+ 1:12
4.	KVT	1 : 31	+ 1:19
5.	SLGBH	1 : 33	+ 1:17
6.	FKTHS	1 : 49	+ 1:01
7.	JPGADM	1 : 38	+ 1:12
8.	SKTB	1 : 39	+ 1:11
9.	NTGB	1 : 38	+ 1:12
10.	SLGV	1 : 50	-
11.	DNSL	1 : 45	+ 1:05
12.	JPLH	1 : 50	-
13.	DNB	1 : 29	+ 1:21
14.	DNG	1 : 31	+ 1:19
15.	JMJG	1 : 33	+ 1:17
16.	MTGHS	1 : 100	- 1:50
17.	SLGBK	1 : 46	+ 1:04
18.	JPGMN	1 : 29	+ 1:21
19.	HPBV	1 : 83	- 1:33
20.	RKSM	1 : 50	-

'+' indicates smaller TPR than Optimum TPR.

'-' indicates higher TPR than Optimum TPR.

Table : IV

SL.No.	Abbreviated School Name	Actual Student Strength	Estimated Student Strength (with TPR of 1 : 50)	Difference
1.	JPGSNLA	1200	1550	+350
1.	SLGNIL	1700	2000	+300
3.	JPGHS	1000	1300	+300
4.	KVT	400	650	+250
5.	SLGBH	1400	2100	+700
6.	FKTHS	2000	2050	+050
7.	JPGADM	650	850	+200
8.	SKTB	1100	1400	+300
9.	NTGB	1000	1300	+300
10.	SLGV	900	900	-
11.	DNSL	900	1000	+100
12.	JPLH	1092	1100	+008
13.	DNB	687	1200	+513
14.	DNG	560	900	+340
15.	JMJG	200	300	+100
16.	MTGHS	1600	800	-800
17.	SLGBK	875	950	+075
18.	JPGMN	350	600	+250
19.	HPBV	750	450	-300
20.	RKSM	1000	1000	-

'+' indicates schools running below capacity.

'-' indicates schools running above capacity.

Table-V

Sl.No.	Abbreviated School Name	Actual Staff Strength (Teaching)	Estimated Strength (Teaching) (Based on TPR 1:50)	Difference
1.	JPGSNLA	31	24	-7
2.	SLGNIL	40	34	-6
3.	JPGHS	26	20	-6
4.	KVT	13	08	-5
5.	SLGBH	42	28	-14
6.	FKTHS	41	40	-1
7.	JPGADM	17	13	-4
8.	SKTB	28	22	-6
9.	NTGB	26	20	-6
10.	SLGV	18	18	0
11.	DNSL	20	18	-2
12.	JPLH	22	22	0
13.	DNB	24	14	-10
14.	DNG	18	11	-7
15.	JMJG	6	4	-2
16.	MTGHS	16	32	+16
17.	SLGBK	19	18	-1
18.	JPGMN	12	7	-5
19.	HPBV	9	15	+6
20.	RKSM	20	20	0

'+' indicates under staffed

'-' indicates over staffed.

NOTES AND REFERENCES

1. See, Selected Educational Statistics 1984-85 ; Studies in Educational Statistics No. 1, 1986, Ministry of HRD, Deptt. of Education, Planning, Monitoring and Statics Division, Govt. of India, 1986.
2. Singhal, R.P., Indian Schools : A Study of Teacher-Pupil Ratio (New Delhi: Vikas Publishing, 1988).
3. Reddy V.E. and Sneha Joshi, A Trend Reports in Higher 2nd Survey of Research in Education, (Baroda: Society for Educational Research and Development, 1979).
4. Goyal, J.C., Planning Teacher Requirements in the States - A Study of Procedures and Criteria (New Delhi : Deptt. of Teacher Education, NCERT, 1975).
5. Adaval, S.B., An Investigation into the qualities of Teachers under Training, Ph.D.(Ed.), Allahabad University, 1952.
6. Mehta, V.B., A Factorial Analysis of Teaching Ability of Graduate Pupil-Teachers of Secondary Teachers' Training Colleges, Ph.D.(Edn.), Nag. Univ., 1972.
7. Sharma, S., Relationship between Patterns of Teacher Class Room Behaviour and Pupils' Attainment in terms of Instructional Objectives, Ph.D., Edu. MSU, 1972.
8. Padma, M.S., Teaching and Teacher Behaviour - A Trend Report, in Buch, M.B.(Ed.), Second Survey of Research in Education (Baroda: Society for Educational Research and Development, 1979).
9. Roka, S.D., A comparative Study of Verbal Teaching Behaviour Patterns and Students' Achievement in terms of Instructional Objectives, Ph.D., Edu., MSU, 1976.

10. Jangira, N.K., Classroom Behaviour Training of Teachers and its Relationship with some Selected Measures of Pupils Criteria of Teacher Effectiveness, Ph.D.Edu, MSU, 1972.
11. For details, see, Memo Nos. 2725-Edn(G)/10 R-2/60, dated 26.7.61, and No.343 Edn.(S) dated Calcutta, the 3rd March, 1973, of the Education Department, Government of West Bengal..
12. TPR stands for 'TEACHER-PUPIL RATIO'.