

**PRIVATE COSTS OF PRE SERVICE TEACHER
EDUCATION PROGRAMME: BY TYPE OF
INSTITUTIONS, GENDER AND NATURE OF RESIDENCE**

Prof. Usha Mishra¹

Ms. Prerna Mandhyan²

Abstract

None can deny the importance of teachers in their life. The Education Commission (1964-66) observed, “The destiny of India is being shaped in her classrooms” and that ‘as is the teacher, so is the nation’ to emphasize about the importance of the teachers. Research suggests that pre-service teacher education often provides the first step in the professional development of teachers. Cost analysis can reveal the cost implication of an education policy, assess the financial feasibility and sustainability of an education reform, provide diagnosis of past and current resource utilization in education, project future cost requirements and evaluate the relative efficiency of alternative education policies or interventions. In a search of the literature, few empirical studies were found documenting costs of any teacher education programme, and none within the last few years. Therefore, the researcher conducted this study among the four types of institutions within the range of Allahabad city and found that there is significant difference in private cost of pre service teacher education programme by type of institutions but no significant difference found on the basis of gender and nature of residence.

Keywords: Pre service teacher education programme, financial feasibility and sustainability, education reform, relative efficiency of alternative education policies.

¹ Professor, Dept. Of Education, University of Allahabad, Allahabad

² D.Phil. Scholar, Dept. Of education, University of Allahabad

1. Introduction

Enlightened, emancipated and empowered teachers lead communities and nations in their march towards better and higher quality of life. Research suggests that pre-service teacher education often provides the first step in the professional development of teachers. It exposes pre-service teachers to new perspectives as well as prepares them in knowledge and skills (Wilke, 2004). It equips them with knowledge of subject matter, and pedagogical content knowledge, or knowledge of how to teach (Wilke, 2004; Shulman, 1987).

Education is no more being as a social service but as a necessary economic input. Investment in education is treated as a factor contributing to the development of human resources. "In Indian thinking, a human being is a positive asset and a precious national resource, which needs to be cherished, nurtured and developed with tenderness and care, coupled with dynamism". One could cite some Human Capital Theory models, e.g. the ones of Becker or Lucas, to show the importance of investing in human capital (i.e. education) for the economic growth of a nation. According to human capital theory, education raises earnings because it enhances workers' skills, thus making employees more productive and more valuable to employers.

There is a large body of literature on education costs in both less developed countries and developed countries that demonstrates in important applications of cost analysis in education. Cost analysis can reveal the cost implication of an education policy, assess the financial feasibility and sustainability of an education reform, provide diagnosis of past and current resource utilization in education, project future cost requirements and evaluate the relative efficiency of alternative education policies or interventions. Cost studies can contribute significantly to decision-making, planning and monitoring in education (Tsang, 1988).

The costs of teacher training are the direct and indirect resources devoted to such training. The methodological issues concerning the costing of a teacher training programme include identification of economic costs, classification and measurement of training costs, and estimation of costs and the decision context.

Cost studies can be grouped into three categories- costing and feasibility testing studies, behavioural studies of educational costs and cost-benefit and cost-effectiveness analysis.

2. Objective of the study:

To estimate and analyze the private cost of pre service teacher education programme at secondary stage for teacher education graduates of

- Government aided and self financed institutes
- Gender – Male and female and
- Nature of residence- hostel, rental rooms and with family

3. Hypothesis of the study:

3.1. There is significant difference between private costs of pre service teacher education programme for teacher graduates of :

3.1.1. There is significant difference between private costs of pre service teacher education programme for teacher graduates of Government aided (K.P.T.C.) and self financed institutes (S.S.K.G.D.C.).

3.1.2. There is significant difference between private costs of pre service teacher education programme for teacher graduates of Government aided (K.P.T.C.) and self financed institutes (E.C.C.).

3.1.3. There is significant difference between private costs of pre service teacher education programme for teacher graduates of Government aided (K.P.T.C.) and self financed institutes (SHIATS).

3.2. There is significant difference between private costs of pre service teacher education programme for teacher graduates on the gender basis.

3.3. There is significant difference between private costs of pre service teacher education programme for teacher graduates on basis of nature of residence.

3.3.1. There is significant difference between private costs of pre service teacher education programme for teacher graduates of who reside in hostel and rental rooms.

3.3.2. There is significant difference between private costs of pre service teacher education programme for teacher graduates of who reside in hostel and with family.

3.3.3. There is significant difference between private costs of pre service teacher education programme for teacher graduates of who reside in rental rooms and with family.

4. Research Design

4.1. Research Methodology: The study utilized quantitative methodology with a descriptive research design. Using the survey method (schedule for collecting costs) and analytical techniques were used for this study.

4.2. Population : All the students registered in the session 2005-06 and 2006-07 for one year bachelor degree programme of the four institutions at Allahabad– K.P. Training College, S.S. Khanna Degree College, Ewing Christian College and Allahabad Agriculture Deemed University, - constituted the population for the study.

4.3. Sample: Sample will consist of two types of teacher training institutes of Allahabad:

Type of Institution	Name of the Institution	No. of pass out Students from the session 2005-06 & 2006-07
1. Government aided	K.P. Training College, Allahabad	37
2. Self-financed Institutes	S. S. Khanna Degree College, Allahabad	56
	Ewing Christian College, Allahabad and	25
	Allahabad Agriculture Institute Deemed University	32
Total		150

4.4. Tool: A schedule is used to collect the data of the Private Costs of Pre Service Teacher Education Programme from pass out students. This schedule is divided into four sections which consist of:

- Section-‘A’- General Information of the informants
- Section-‘B’- Expenditure on Education done by the informants
- Section-‘C’- Employment Status and Earnings of the informants after completion of Pre-service teacher education programme

4.5. Data Collection: The study makes use of both primary as well as secondary data .The primary data will be collected by schedule and office records available in the institutes. Secondary data is collected from books, journals, magazines and research papers on the same or related variables or attributes.

4.6. Estimation model: The approach of costing and feasibility studies and behavioural studies of educational costs is used to calculate the private costs of pre service teacher education programme in the present study. Here, the private cost means household expenditure on pre service teacher education programme i.e. tuition fees, other school fees, uniforms, transportation, books and other supplies etc. The unit cost is also derived for private costs i.e.

Private Cost per learner = Total expenditure/ No. of student included in sample

4.7. Statistics used for analysis of data: Completed schedules are analyzed by econometric angle. Beside econometric calculation some parametric test i.e. students’‘t’-test to find out the significance difference between two means. The data were analysed by SPSS version 21 and Microsoft Excel too.

5. Empirical Results:

Null hypothesis.3.1: There is no significant difference between private costs of pre service teacher education programme for teacher graduates of Government aided and self financed institutes.

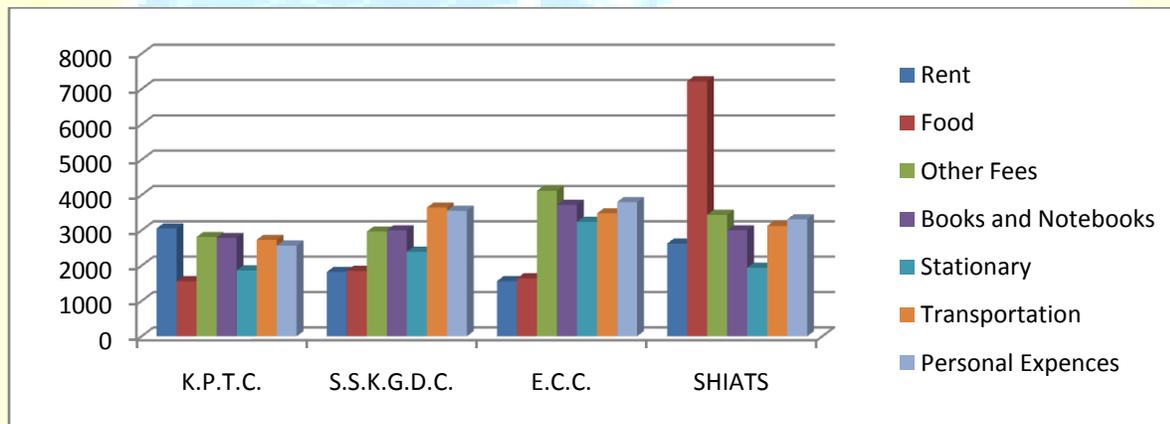
Table 5.1

Average Private Costs of Pass out students of TEP session 2005-06-07 (in Rs.): Institution wise

	Rent	Food	Other fees	Books and Notebooks	Stationary	Transportation	Personal Expenses	Total
K.P.T.C.	3054.05	1559.46	2810.81	2783.78	1864.86	2729.73	2567.57	51270.2
S.S.K.G.D.C.	1821.43	1852.86	2964.29	3000.00	2392.85	3642.86	3553.57	19227.8
E.C.C.	1560.00	1640.00	4120.00	3720.00	3240.00	3480.00	3800.00	21560
SHIATS	2625.00	7218.75	3437.50	3000.00	1937.50	3125.00	3312.50	24656.2

Graph 5.1

Average Private Costs of Pass out students of TEP session 2005-06-07 (in Rs.): Institution wise



Null hypothesis 3.1.1: There is no significant difference between private costs of pre service teacher education programme for teacher graduates of Government aided (K.P.T.C.) and self financed institutes (S.S.K.G.D.C.)

Table 5.2

Comparison of Private Costs of pass out students on TEP between Govt. Aided and Self financed Institution (S.S.K.G.D.C.)

Type of Institutions	Name of the Institution	N	df	Mean	S.D.	t-value

Govt. Aided	K.P.T.C.	37	94	29621.62	8104.70	7.44
Self Financed	S.S.K.G.D.C.	56		48446.43	5376.45	

The table shows that the calculated t- value is greater than tabulated t-value i.e.1.98, with 94 degree of freedom (df) at .05 level of significance. It showed that there was significant difference in private costs of pre service teacher education programme for teacher graduates of Government aided (K.P.T.C.) and self financed institute (S.S.K.G.D.C.). Therefore null hypothesis is rejected. The tuition fees is higher in S.S.K.G.D.C., therefore private costs of pre service teacher education programme resulted higher for it. But, the study by Gupta (1982) and Shah (1987) estimated private costs of college education and found against this result that among the main components of private cost, fee consisted of a very small proportion of the total private cost. Nair (1990), in his study found that the tuition fees accounted for minor proportion in the postgraduate courses during 1985-86 in Kerela.

Null hypothesis 3.1.2: There is no significant difference between private costs of pre service teacher education programme for teacher graduates of Government aided (K.P.T.C.) and self financed institutes (E.C.C.)

Table 5.3

Comparison of Private Costs of pass out students on TEP between Govt. Aided and Self financed Institution (E.C.C.)

Type of Institutions	Name of the Institution	N	df	Mean	S.D.	t-value
Govt. Aided	K.P.T.C.	37	60	29621.62	8104.70	9.23
Self financed (Autonomous)	E.C.C.	25		67480	11692.16	

The table shows that the calculated t- value is greater than tabulated t-value i.e.2.00, with 60 degree of freedom (df) at .05 level of significance. It showed that there was significant difference in private costs of pre service teacher education programme for teacher graduates of Government aided (K.P.T.C.) and self financed institute (E.C.C.). Therefore null hypothesis is rejected.

Null hypothesis 3.1.3: There is no significant difference between private costs of pre service teacher education programme for teacher graduates of Government aided (K.P.T.C.) and self financed institutes (SHIATS)

Table 5.4

Comparison of Private Costs of pass out students on TEP between Govt. Aided and Self financed Institution (SHIATS)

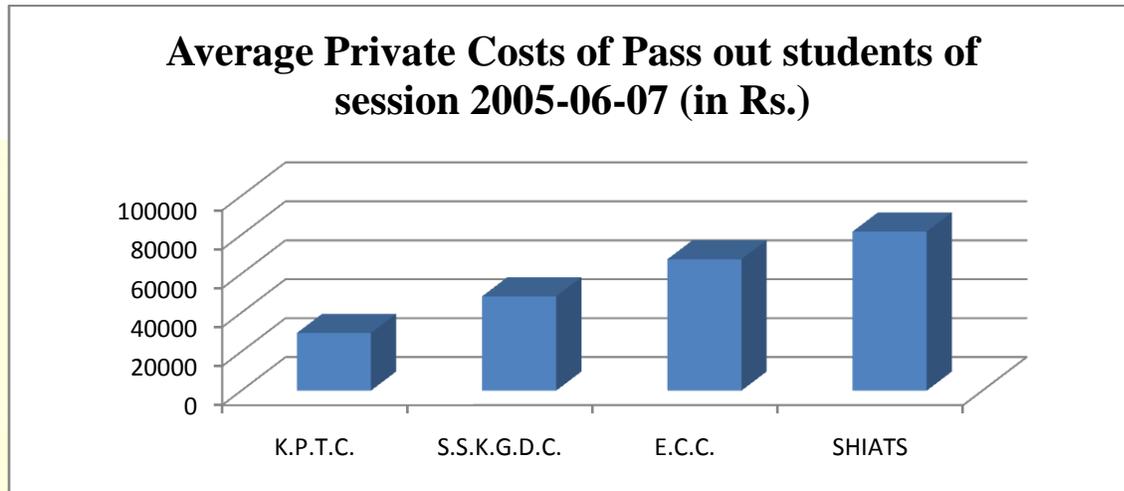
Type of Institutions	Name of the Institution	N	df	Mean	S.D.	t-value
Govt. Aided	K.P.T.C.	37	67	29621.62	8104.70	7.84
Self financed (Deemed)	SHIATS	32		81718.75	14458.47	

The table shows that the calculated t- value is greater than tabulated t-value i.e.2.00, with 67 degree of freedom (df) at .05 level of significance. It showed that there was significant difference in private costs of pre service teacher education programme for teacher graduates of Government aided (K.P.T.C.) and self financed institute (SHIATS). Therefore null hypothesis is rejected.

Direct private costs are important to consider not only for proper cost accounting purposes, but also because they have strong implications for educational quality and equity (Tsang 1995a; Tsang et. al. 2000). In many developing countries, they are the major source of funding for important education inputs such as textbooks and other learning materials. They also could be a heavy economic burden on some households, particularly those from poor and rural backgrounds that could adversely affect school attendance.

Graph 5.6

Comparison of Average Private Costs of Pass out students of session 2005-06-07 (in Rs.) on TEP: Institution wise



Null hypothesis 3.2: There is no significant difference between private costs of pre service teacher education programme for teacher graduates on the gender basis.

Table 5.5

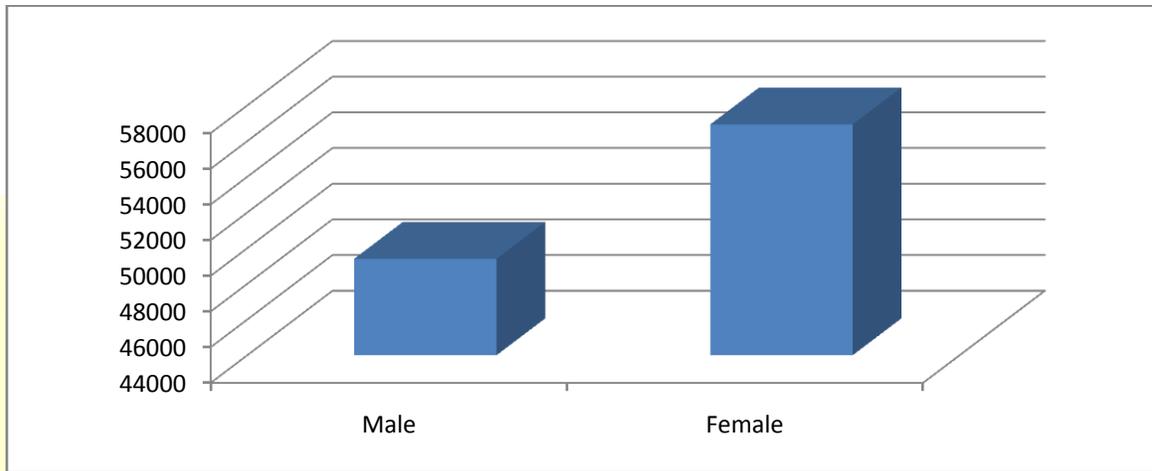
Comparison of Private Costs of pass out students of TEP between Male and Female

Gender	N	df	Mean	S.D.	t-value
Male	55	148	49403.51	16287.37	0.05
Female	95		56935.48	25942.84	

The table shows that the calculated t- value is less than tabulated t-value i.e.1.98, with 148 degree of freedom (df) at .05 level of significance. It showed that there is no significant difference in private costs of pre service teacher education programme for teacher graduates on gender base. Therefore null hypothesis is accepted. The reason behind this is that tuition fees is the major part of the total costs and there is no discount in tuition fees on the basis of gender so null hypothesis is accepted.

Graph 5.7

Comparison of Private Costs of pass out students of TEP between Male and Female



Null hypothesis 3.3: There is no significant difference between private costs of pre service teacher education programme for teacher graduates on basis of nature of residence.

Null hypothesis 3.3.1: There is no significant difference between private costs of pre service teacher education programme for teacher graduates of who reside in hostel and rental rooms.

Table 5.6

Comparison of Private Costs of pass out students of TEP reside in Hostel and Rental Rooms

Nature of Residence	N	Df	Mean	S.D.	t-value
Hostel	4	30	46500	16603.21	0.99
Rental Rooms	28		46392.86	22493.36	

Null hypothesis 3.3.2: There is no significant difference between private costs of pre service teacher education programme for teacher graduates of who reside in hostel and with family.

Table 5.7

Comparison of Private Costs of pass out students of TEP reside in Hostel and with Family

Nature of Residence	N	Df	Mean	S.D.	t-value
Hostel	4	120	46500	16603.21	0.33
With family	118		56152.54	20089.81	

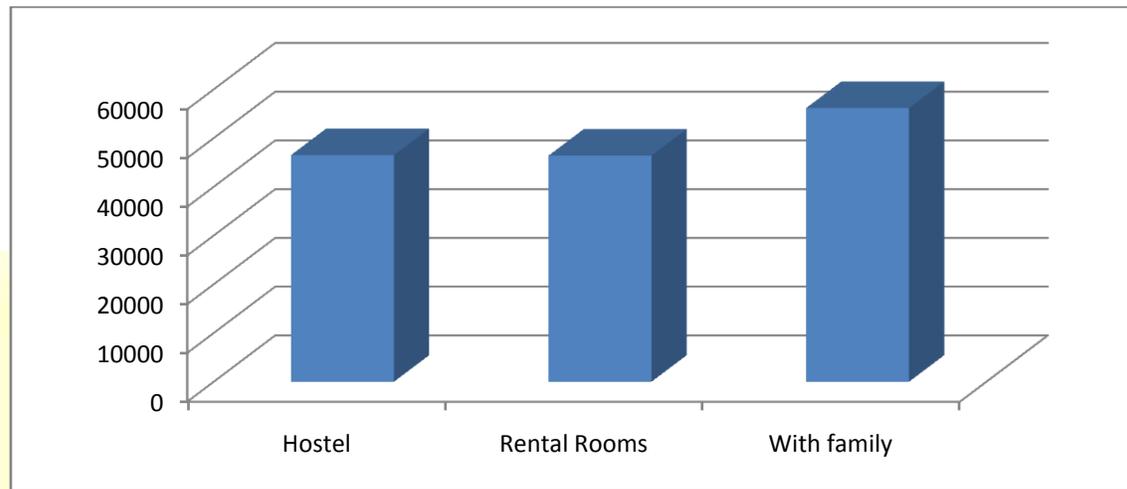
Null hypothesis 3.3.3: There is no significant difference between private costs of pre service teacher education programme for teacher graduates of who reside in rental rooms and with family.

Table 5.8

Comparison of Private Costs of students of TEP reside in Rental Rooms and with family

Nature of Residence	N	Df	Mean	S.D.	t-value
Rental rooms	28	144	46392.86	22493.36	0.04
With family	118		56152.54	20089.81	

The above tables 12, 13 & 14 show that the calculated t- value is less than tabulated t-value at .05 level of significance. It shows that there is no significant difference in private costs of pre service teacher education programme for teacher graduates on the nature of residence. The tuition fees are the major part of total cost and there is difference in tuition cost of govt. aided and self financed institutes. However, nature of residence have not much affected the difference in total cost and almost mean is same in each head. From the field survey it is clear that the expenditure of students is almost same in each head. Therefore null hypothesis is accepted.

Graph 5.8**Average Private Cost of pass out students of TEP on the basis of Nature of Residence****Findings of the study:**

- There is great difference in tuition fees of govt. aided and self financed institutions.
- The highest expenditure on the rent is done by the students of K.P.T.C. while there is extremely high expenditure on food is done by students of SHIATS.
- The highest expenditure on books, notebooks and stationary is carrying out by the students of E.C.C. even the highest other type of fees beside tuition fees is also paid by E.C.C. students.
- The transportation and personal expenses is highest to the students of S.S.K.G.D.C.
- The significant difference found between the private costs of govt. aided and all self financed institutes.
- The highest private cost is bear by the students of SHIATS.
- There is no significant difference found between the private costs of male and female.
- There is no significant difference found in the private costs on the basis of nature of residence.

Implication for policy making

- Direct private costs are important to consider not only for proper cost accounting purposes, but also because they have strong implications for educational quality and equity (Tsang 1995a; Tsang et. al. 2000). In many developing countries, they are the

major source of funding for important education inputs such as textbooks and other learning materials. They also could be a heavy economic burden on some households, particularly those from poor and rural backgrounds that could adversely affect training attendance.

- Fees should be uniform as far as possible in all the teacher education institutions. Government should make a monitoring body for keeping an eye on all the institutions, so that they
- In light of the vast amount of money spent by students and taxpayers on for profit colleges and the limited evidence of their effectiveness, it seems appropriate to consider whether further regulation of the for profit industry can be justified.
- There is need to address the equity and gender issues. The government should promote the girls' participation in this field although ratio of females is higher than men but still from the field survey it is clear that the IRR and NPV of females is lower than males.
- There should be some extra facilities and leniency for the females especially in private sector.
- Number of institutions and seat intake is higher in self financed institutions not in govt. aided so that the students who are not able to pay fees has to stop their education or they have to change their direction or they move to another city so the government should establish some govt. aided institutions.

References:

- Achieving Millennium Development Goal in Education in Lagos State: Cost Challenges. Retrieved on April 28, 2013 from
- <http://www.thefreelibrary.com/Achieving+millennium+development+goal+in+education+in+Lagos+State%3A...-a0222252940>
- Blaug, M. (ed.) (1968). Economics of Education- Selected Readings, vol. 1 & 2. Penguin Books Ltd., Harmondsworth
- Coombs, P. and Hallak, J. (1972), Managing Educational Costs, Oxford University Press, New York, NY.
- Chalam, K.S., A Study of Finances, Productivity and Unit Costs of Higher Education in Andhra Pradesh, Ph.D. Eco., And. U., 1981

- Hanushek, E.A. (2011). The economic value of higher teacher quality. *Economics of Education Review*, vol. 30, pp. 466-479
- Pathak, V.B., *Teacher education in Eastern U.P. a Quantitative and Qualitative Analysis*, Ph.D. Education, B.H.U., 1979
- Ram, S., *An Evaluation of Correspondence Education in terms of Cost and Academic Performance*, Ph.D. Edu., Mee. U., 1984
- Sahoo, P.K. (1990). Private costs of post graduate students of Himachal Pradesh University. *Journal of Educational Planning and Administration*, vol.4, no. 3, pp. 49-57
- Tsang, M.C. (2002). Comparing the Costs of Public and Private Schools in Developing Countries. In Levin, H. and McEwan, P (eds.) 2002 Yearbook of the American Education Finance Association
- Tsang, M.C. (1999). *The Economics and Resourcing of Education*. Routledge : International companion of Education, pp.129-152
- Tsang, M. (1988). Cost Analysis for Policymaking in Education. A review of cost studies in education in developing countries. *Review of Educational Research*, 58 (2), 181-230
- Tsang, M. (1995a). Public and private costs of schooling in developing countries. In Carnoy, M. (1995). *The international Encyclopaedia of economics of education* (pp. 393-398). Pergamon Press.
- Tsang, M.C. (1997). Cost Analysis for Improved Educational Policy Making and Evaluation. *Educational Evaluation and Policy Making*, Vol.19, No.4, pp. 318-324
- Tsang, M.C. (1997). The Cost of Vocational Training. *International Journal of Manpower*, Vol. 16, No. ½, pp. 65-69
- Wilke, R. (2004). How Content area Influences Choice of Instructional Methods: an Examination of one Component of Pre-service Teacher Belief. Unpublished master's thesis, The Florida State University, College of Education, USA.