

Unit Recurring Cost for Regular and Correspondence Courses in Punjabi University, Patiala

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The cost of education has much significance as it helps in measuring the internal efficiency of educational system and sanctioning grants for the maintenance of university. Till eighties both State and Central Governments were giving liberal grants to the institutions of higher education. But now the trend has changed due to financial crunch and shifting of priority from higher to primary education level. The paradigm shift from higher education to primary education has been based on the premise that higher education is a non-merit good and primary education is a merit good. Swaminadhan (1995) pointed out that the share of higher education in the total allocation for education has been declining. It was 20.89 percent during sixth plan, which came down to 11.20 percent during eighth five-year plan.

Punnayya Committee Report (1993) has suggested that unit cost formula based grant mechanism should be adopted and substantial part of the institutional cost should be realized from the students. Tilak (1995) favours recovery of 20-25 percent of the cost from the students and the institutions/government should bear 75 to 80 percent of recurring cost. He stressed that "very high cost recovery ratios should not be favoured as, if higher education is now a privilege of rich, steep increase in fees would accentuate this phenomenon." So it is of utmost importance to calculate institutional recurring cost to see how much burden the institution is taking. In this study an attempt has been made to calculate the unit recurring cost by level and modes/types of education for the session 2001-02.

The educational cost includes institutional cost, private cost and opportunity cost. The institutional cost, which is spent by the institution to provide education, includes recurring and capital cost. The recurring cost is incurred every year to keep the courses of education running and it has relationship with the output. The non-recurring cost includes investment in land, buildings and other infrastructure. It is to create the seat of education. It is also known as capital cost. Private cost is borne

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by the student or his/her guardian. It includes tuition fees, funds, examination fees, expenditure on books, stationary, board and lodging, transport and other incidental expenses. The opportunity cost is earnings foregone by the student while receiving education during the working-age-period. The opportunity cost is high in the countries where employment level is high. The effective cost is the cost per successful student. It considers the effect of wastage and stagnation. "When the socio-economic backgrounds of the students and instructional facilities of the institutions are poor, the problem of dropout and grade repeaters is likely to be high." Salim (1997). The unit cost of education simply means average cost per student. The unit institutional recurring cost is per student cost incurred by the institution during an academic session. The unit recurring cost is determined by enrolment, pupil teacher ratio, salary of teaching and non-teaching staff and expenditure on student services etc. In this study only unit recurring cost of Regular Department of Punjabi University and correspondence courses departments students has been worked out respectively.

The institutional recurring cost includes teaching cost and non-teaching cost. The teaching cost is the expenditure in teaching departments on the salary to the teachers, contingency and laboratory/department library etc. The total expenditure on the above items is divisible by the number of students in the department to find teaching cost. The non-teaching cost is calculated on the basis of expenditure on general administration, examination, central library, dispensary, hostels, security, sanitation, transport, telecommunication, computer centre etc. The expenditure on the above items is not divisible among university students only but also among other students studying in affiliated colleges etc.

The teaching cost was calculated by dividing the total expenditure on teaching in the departments by the number of students. The non-teaching cost was calculated by dividing expenditure by the category of student on which it has been incurred. There were 4 types of students, which are given in Table 1. The administrative cost was calculated by dividing the total expenditure on administration by the number of students in the university and affiliated colleges. The examination cost was calculated by taking into consideration the number of regular students in the university, CC department students, regular college students and private students who appeared privately in the examination. Library expenditure was divided between regular and CC students. The expenditure on computer centre/internet, transport, dispensary, sanitation, security, horticulture etc. was divided among the regular students of the university.

Table 1

Session wise Number of Different Categories of Students of the Punjabi University

	Category of Students	1971-72	1981-82	1991-92	2001-02
A	University regular students	1180	2246	2932	3008
B	University CC students	3327	4270	4434	9466
C	Regular college students	25847	32165	34074	55398
D	Private students	20678	30944	31409	43825
	Total	51032	69625	72849	111697

Unit Recurring Cost in Regular Teaching Departments Unit Recurring Cost

The unit recurring unit cost includes both teaching as well as non-teaching cost. The unit recurring cost for professional faculty students was the lowest and it was highest for science students. As shown in table 2 the cost for social science faculty is higher than the professional courses but less than the social sciences courses.

Table 2

Per Student Recurring Cost by Type of Education

	Social Sciences	Sciences	Professional
Teaching Cost	50607 (46.18)	76545 (56.48)	25236 (29.97)
Non-Teaching Cost	58977 (53.82)	58977 (43.42)	58977 (70.03)
Recurring Cost	109584 (100)	135522 (100)	84213 (100)

The social sciences cost is 19 percent less costly than the sciences course but 30 percent higher than the professional course. The main component for difference is teaching cost. It is about 30 percent at recurring cost in the faculty of professional courses, 56.48 percent in the faculty of sciences and 46.18 percent in the social science faculty.

Average Teaching Cost by Type and Level of Education

The teaching cost has been calculated on the basis of workload per course and number of students for faculties of social sciences, sciences and professional courses. The teaching cost is based on the total expenditure in the department/faculty for the salaries of teachers, contingency, departmental library books or laboratory equipment/chemicals etc. The total expenditure in department was apportioned for different classes on the basis of workload of teachers and then expenditure was divided by number of students of the specific class to calculate the teaching cost.

Table 3

Unit Teaching Cost Type and Level of Education

	Social Sciences	Sciences	Professional
Degree	53133 (30)	27404 (101)	17393 (487)
PG	48926 (394)	86666 (616)	42893 (311)
M.Phil.	67376 (35)	58970 (7)	-
M.C.A.	-	-	10177 (111)
Combined Cost	50607 (459)	76545 (739)	23236 (909)

NOTE : *The figures in parenthesis are number of students.*

Table 3 shows the teaching cost for different levels and types of education. The teaching cost in the faculty of professional courses is the lowest as compared to the cost of faculties of sciences and social sciences. The teaching cost of science is

303.3 percent higher than faculty of professional courses and it is 151 percent higher than social sciences faculty. The teaching cost of social sciences is 200.5 percent higher than professional courses. The reason for the low cost in professional faculty is higher enrollment and less optional papers.

The science education is costly than arts because social sciences are class based courses whereas the sciences courses are lab-based courses. The M.Phil. is costlier in the faculty of social science than sciences. In social sciences the workload for M.Phil. and P.G. classes was same but due to small number of students M.Phil. is costly than P.G. classes. The science M.Phil. course is less costly than P.G. classes because there are more optional papers in P.G. courses while fewer options and less periods per week for M.Phil. Therefore due to higher work load the M.Sc. is more costly than M.Phil. The degree course in social sciences is costly than the P.G. classes due to less enrolment while in science and professional courses it is cheaper than P.G. classes due to higher-level of enrolment and less optional subjects.

Per-Student (Unit) Effective Cost of education

The effective recurring cost takes into the consideration the wastage and stagnation. The ratio of actual to minimum number of years was calculated to see the effect of dropouts and failures on the cost. When this ratio is multiplied by the recurring cost it is equal to the effective cost. To calculate the effective cost method developed by Blaug et al. (1969) was used.

Table 4
Per Student Effective Cost by Type of Education

Faculties	Recurring Cost	Effective Cost
Social Sciences	109084	$NRC \times 1.16 = 127117$
Sciences	135522	$NRC \times 1.12 = 151785$
Professional	84213	$NRC \times 1.11 = 93476$

The table 4 shows that the wastage and stagnation was the highest in the sciences faculty i.e. 16 percent, it was 12 percent in sciences faculty and 11 percent in the faculty of social sciences was Rs. 127117 for social sciences, for sciences it was Rs. 151785 and for professional courses it was 93476.

Recurring Cost in Correspondence Courses Department

The recurring cost of education has been calculated for Correspondence Courses Department in relation in regular teaching and research departments of the university. The number of regular students in the university during the session 2001-02 was 3008 while it was 9466 for the CC department. During the session 2001-02, 33.21 percent of the budget was allotted for regular teaching and research departments while only 5.19 percent was allotted for the correspondence courses. It will not be possible for the university to create more seats in the regular teaching departments due to shortage of funds. Therefore, distance education mode is a viable option. Moreover, education through correspondence mode being economic and is learner oriented as a result students from low-income categories of the society can get education through correspondence courses.

Table 5 shows the normal recurring and net recurring cost in the correspondence courses as compared to regular teaching departments. The normal recurring cost for regular teaching department was Rs. 107719 while it was only Rs. 6417 in the CC department. It shows that the recurring cost in regular departments is 16.79 times higher than the CC department cost. Similarly, the fees in regular department were 7.16 times higher than correspondence courses department. Which means that the poor students can get education with little burden through correspondence courses. So, education through correspondence mode is beneficial both for the institution as well as students. The university bears 81.2 percent of the burden of regular students while it was 55.93 percent in case of correspondence students. The CC department students bear 44.07 percent of the burden by paying only Rs. 2828 per annum, while regular students bear 18.8 percent of the burden by paying 20249 per annum. So, there is a need to strengthen the correspondence departments to manage the financial resources on one hand and also to ensure equity and social justice on the other.

Table 5
Unit Recurring and Net Recurring Cost for Regular and CC Departments

Cost	Regular Departments	CC Department
Normal Recurring Cost	107719 (100)	6417 (100)
Fees	20249 (18.80)	2828 (44.07)
Net Recurring Cost	87470 (81.20)	3589 (55.93)

Note : The figures in parenthesis show the percentages.

Though there has been a phenomenal increase in the number of institutions and enrollment at the higher educational level yet we have been able to enroll about 6 percent population of relevant age group of 17-23 years in the institutions of higher education. "Currently about 5 percent of the relevant age group population are enrolled in higher education institutions in India, compared to above 70 percent in USA and Canada, more than 30 percent in South Korea and several European countries and more than 20 percent in several developing countries such as Philippines and countries in Latin America" (J.B.G. Tilak in University News Feb 27, 1995). The figures indicates that on one hand there is a need to enroll more students at the higher education level and on the other hand it is becoming difficult even to run the existing institutions of higher learning due to the shrinking govt. grants. Therefore, it is evident that the development of Correspondence courses/distance education departments is the need of present time.

Impact of Wastage and Stagnation on Recurring Cost

It has been observed that there is a large number of dropouts and failures in the correspondence courses department. In this regard an attempt was made to check the ratio of total to minimum number of years to complete the course in the CC and regular departments. The ratio showing wastage and stagnation was also used to calculate the effective cost of education in regular and correspondence courses.

Table 6
Per Student Net Effective Cost in Regular and CC Department

Cost	Regular Departments	CC Department
Net Recurring Cost	87470	3589
Ratio of Total to Minimum Number of years to complete the course	1.13	1.75
Net Effective Cost	98841	6281

Table 6 shows that the wastage and stagnation was higher in the department of correspondence as compared to regular departments. In regular departments students take 1.13 years to complete the course of one year while in correspondence courses department they take 1.75 years to complete the course of one year. The prolonged duration to complete the course. Though correspondence mode is one of the reason to

150 / Unit Recurring Cost for Regular and Correspondence Courses in Punjabi University, Patiala

enhance the ratio of wastage and stagnation higher in the department CC. However, in spite the higher level of wastage and stagnation the education is much cheaper in the department of Correspondence Courses. The net per student effective cost in CC department is only Rs. 6281 while it was 98841 in the regular department. This shows that net effective cost in regular department is 15.74 times higher than the CC department. The net effective cost measures the real burden on the University to produce a successful student in a year. Therefore, keeping in view all aspects like fees, which measures burden on the student, net effective institutional cost that measures the real burden on the university, the study strongly favours the development of correspondence courses/ distance education department.

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