

Economics of Education

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Ansari, M.M. 1989. **Economics of distance higher education association.** Independent study. *Association of Indian Universities.* (ICSSR Funded).

Problem: This study focuses attention on the economics of distance higher education with special reference to correspondence courses.

Objectives: (i) To describe the development of distance education with a special focus on its evolution, the regional distribution of institutions of distance education in India and an evaluation of the correspondence courses and continuing education at the University of Delhi, particularly from the point of view of equalising educational opportunities, (ii) to critically examine the theory of economics of distance education, and (iii) to discuss various aspects of the financing of distance higher education, particularly focusing on the qualitative and quantitative aspects and to suggest measures for a cost effective methodology that would ensure qualitative and quantitative development of distance learning.

Methodology: The data were collected from the annual reports of selected universities, the UGC statistical profile of the study of correspondence courses in India, the records of the accounts department of Delhi University, and the report of the Mulay Committee on Correspondence Education. The collected data were treated with averages, coefficient of variation and correlation coefficient, etc.

Major Findings: (1) The development of distance education had been highly uneven in India. (2) Thirty-four Indian universities offered correspondence courses as on the day. (3) Large inter-state variations were observed with regard to availability of facilities for correspondence courses in different states. (4) While the conventional system of higher education is highly subsidised the distance learning system is almost entirely self financed. (5) Revenue surpluses accrue in the majority of the institutes of correspondence education. (6) On an average, the per student cost of distance education is nearly 15-25% of the cost in the formal system. (7) Though the distance learning system is less costly as compared to the conventional system at a particular point of time, considering the age and composition of the beneficiaries of the distance learning system, it is clear that the overall returns from the distance learning system are likely to be relatively less than those for the conventional system. This is because the beneficiaries of the distance learning system are generally of the higher age group with a shorter working period before them. As a result, the overall cost effectiveness of the distance learning system may not be higher than in the case of the conventional system. (8) A study of the inter temporal trends in the characteristics of the distance learning system shows that the conventions and practices of the conventional system are emulated in the distance learning

system as well, defeating the very purpose of the latter. (9) Low economic cost, at a particular point of time, should not be the alone criterion for preferring the distance learning system to the conventional higher education system. [NR 1230]

Bhatt, M.A. 1989. A study of the funding pattern in education with special reference to educational cess paid by the citizens of Baroda city and its utilisation for the development of primary schools run by the Baroda Municipal Corporation. M.Phil., Edu. *The Maharaja Sayajirao Univ. of Baroda.*

Problem: This is an attempt to identify the funding pattern of municipal schools and also the utilisation of the funds for development of primary schools in advanced urban centres.

Objectives: (i) To find out the patterns of funding by the state government and the municipal corporation for the development of primary education, (ii) to estimate the contribution of the community in Baroda through the educational cess, and (iii) to estimate the per capita cost of pupils enrolled in the municipal schools in the advanced urban centre of Baroda.

Methodology: The administrative and annual reports of the Baroda Municipal School Board are the major source of information. The tools used to collect data included an information schedule, personal discussion with the school management, etc. The collected data were treated with averages and percentages.

Major Findings: (1) The revenue of the Municipal School Board had been steadily increasing. (2) A little above 50% of the resources came from the government grant-in-aid; the contribution from the Baroda Municipal Corporation constituted 30-46% of the total resources and the educational cess amounted to 16% of the total resources for primary education. (3) During a short period, 1982-83 to 1988-89, the schooling expenditure had gone up nearly 2.7 times. The major component of the school

expenditure was the staff salary bill, which constituted more than 83%. (4) Analysis of the composition of school expenditure revealed that very little expenditure was made on pupils' development, in the form of scholarships, teaching aids, instructional materials, etc. [MSY 0913]

D'Leema, S.U. 1988. A study of financial problems of the unaided recognised secondary schools and aided recognised secondary schools of North West Bombay in relation to their academic performance. Ph.D., Edu. *Univ. of Bombay.*

Problem: The study examines the financial resources of aided and unaided recognised secondary schools in Bombay and finds out whether the financial resources and quality of education provided in the schools are inter-related.

Objectives: (i) To make a comparative study of the financial problems of the aided and unaided secondary schools, (ii) to compare the academic performance of the pupils in these categories of schools, (iii) to study whether financial resources and academic progress are interrelated and whether these interrelationships are different for the aided and unaided categories of schools, and (iv) to suggest improvements in the grant-in-aid code for the secondary schools of Maharashtra if finances and progress are linked.

Methodology: A sample of 34 aided and 28 unaided schools provided the necessary data. Questionnaires were addressed to ten college principals. Chi-square was used for analysing the difference between the groups.

Major Finding: In addition to inadequate finances the other factors which adversely affected the academic performance of the schools were: high students-teacher ratio, lack of modern teaching aids, lack of inservice training facilities, lack of remedial teaching and shift system, etc. In unaided schools paucity of funds was mostly

responsible for malpractices and an unhealthy academic atmosphere leading to poor performance. [GJK 0235]

Debi, Sailabala. 1992. **The problems of education of women in a developing state: An economic analysis of the case of Orissa.** Independent study. *Utkal Univ.* (ICSSR Funded)

Problem: This study investigates the economic aspects of women's education using household level information about investments in women's education.

Objectives: To examine several economic facets in the sphere of women's education in Orissa, (ii) to examine the economic contribution of female education and the effect of their education on earnings, (iii) to study the inequalities concerned with inter-group inequalities in the earnings of educated females, i.e. between male and female, urban male-female, SC male-female, ST male-female, through rate of return calculation, and (iv) to examine the policy implications and suggest some measures for development of women's education.

Methodology: Data were collected with the help of a structured questionnaire from a randomly selected sample of 596 households comprising 294 rural and 302 urban households from the Puri District of Orissa. The statistical techniques of correlation and multiple regression, Sopher's index and cost weighted composite index were used.

Major Findings: (1) A private demand for education of women was not a positive function of the family's per capita income. (2) Educated women contributed more in improving the family's socio-economic status than educated men. (3) Education of the female members depended upon the level of education of the parents. (4) The cost of education of women in all categories of population was lower than the cost for male education. (5) The rates of return on education tended to decline for the high and higher levels of education. The private rates of

return were higher than the social rates of return. The rate of return on primary education was the highest among all levels of education. (6) Despite lower educational levels of female members and despite the higher contribution of female education to the socio-economic status of the household and all the region, female education continues to be neglected even in the richer families. This suggested that for improving the educational scene and the educational status of women, social barriers needed to be overcome. [NR 1247]

Gupta, M.L. 1988. **Emerging needs of the Indian economy and significance of education through correspondence.** Ph.D., *Edu. Univ. of Delhi.*

Problem: This is a historical study of correspondence education in India in general and the Rajasthan State in particular.

Objectives: (i) To trace the original development of correspondence education in India with focus on Rajasthan, in the background of economic development in the region, (ii) to relate the pattern of development of correspondence education and the pattern of development of the economy, and (iii) to suggest measures for improvement in correspondence education for making it more effective for economic development.

Methodology: Mostly secondary data were used for the study.

Major Findings: (1) Though correspondence education was introduced in 1962 with the main objective of reducing pressure on the formal system and for providing similar education at less cost, it did not seem to be catching on particularly in Rajasthan. (2) Correspondence education as developed so far, however, did not seem to be suitably tuned to the emerging needs of the state. A similar picture emerged when one studies the overall pattern of development of the economy and of correspondence education in the country as a whole. (3) The per capita cost of correspond-

ence education at the undergraduate level was about double that of education in the formal institutions of higher education. Only at the post-graduate level correspondence education seems to be less expensive as compared to education in the formal institutes of higher education. (4) Past performance and drop-out rate in correspondence education presented a highly discouraging picture as compared to the formal institutions. (5) The finances in correspondence education did not seem to have been managed properly so as to fulfil the objectives laid down before this innovation in education. [RDM 0346]

Gupta, M.L. 1988. **An analysis of the finances of correspondence education and its educational implications: A case study of Rajasthan.** *Indian Educational Review*, Vol. 23(1):16-27.

Problem: The study attempts to analyse the finances of correspondence education and to bring out their educational implications, with special reference to Rajasthan.

Objectives: (i) To find out the income and expenditure of correspondence education, (ii) to calculate the per capita cost of studies of correspondence education, (iii) to analyse the pattern and direction of finances in correspondence education, and (iv) to bring out the educational implications of the analysis of finances of correspondence education.

Methodology: This was a case study confined to correspondence education as provided by the Institute of Correspondence Studies, University of Rajasthan, Jaipur. It was based on primary reference. It covered the period from 1972-73 to 1984-85. On the basis of data collected from the annual budget reports of the university, the income-expenditure, per capita cost and pattern and direction of the finances of correspondence education were calculated. The pattern and direction of finances of correspondence education were judged in the light of the magnitude and trend of expenses in the items of expenditure calculated in terms of index and percentage

figures. The educational implications were drawn in the light of the productivity of correspondence education.

Major Findings: (1) The income remained constant whereas the expenditure had a rising trend. (2) The overall expenditure had increased about five times in 12 years. (3) The per capita cost figures revealed that it ranged from Rs 425 to Rs 550, which is about less than one-third of the cost for a regular student. (4) Expenditure on establishment formed more than half of the total expenditure. (5) Expenditure on teachers' salaries, teaching materials, contact camps and books and journals had shown a decreasing trend. [MPR 1924]

Gupta, S.L. 1990. **A comparative study of the private costs of teachers' preparation in teacher training institutions under different managements in Uttar Pradesh.** Independent study. *National Council of Educational Research and Training*. (ERIC Funded)

Problem: This study attempts to examine the private costs of teachers' preparation in teacher training institutions in Uttar Pradesh, under different types of management.

Objectives: (i) To estimate private costs of teacher preparation in teacher training institutions run by different managements, and (ii) to examine the types and nature of incentives, if any, available to teacher trainees.

Methodology: The sample of the study comprised 735 teacher trainees in B.Ed. colleges located in Agra and Gorakhpur and 45 teacher trainees in BTCs of Agra and Gorakhpur. Questionnaires were used as tools to collect the data. Simple statistical methods were used to analyse the data.

Major Findings: (1) The average private costs of teacher training for Agra and Gorakhpur were between Rs 750 and Rs 951. For the hosteller however, the private costs were quite high ranging from Rs 1,800 to Rs 2,001. (2) The private costs

in the case of elementary school trainees were Rs 1,452 and Rs 1,564 for Agra and Gorakhpur, respectively. Once again, the hostellers incurred higher private costs. [VKR 1189]

Hebbare, V.N. 1989. **Economic value of education: A case study of the electronics and electrical industry in Pune metropolitan city.** M.Phil., Edu. Univ. of Poona.

Problem: This study attempts to use the cost benefit analysis for evaluating the economic value of education in the electronic and electrical industry.

Objectives: (i) To construct age education earning profiles for the employees in the electronic and electrical industry, and (ii) to estimate the social rate of return of investment at various levels of education.

Methodology: A small sample of 10 electronic and electrical industrial units was selected dividing them into two strata: the one with a turnover of less than Rs100 crore and the other with a turnover of more than Rs100 crore. Primary data collections was done with the help of questionnaires and personal interviews. Cost benefit techniques were used.

Major Findings: (1) Social rate of return was higher for higher levels of education. (2) In bigger industrial units higher education gets higher returns than in smaller industrial units. [LHB 0069]

Kurup, M.R. and Thatte, L.R. 1991. **Pricing higher education: A case study of Maharashtra.** Independent study. Mumbai: V.G. Vaze College of Arts, Science and Commerce. (ICSSR Funded).

Problem: The study focuses on the problem of resource crunch in higher education in Maharashtra State, bringing out the implications of the resource crunch for the quality and relevance of higher education.

Objectives: (i) To examine the extent of the resource crunch and its implications for progress

in the sector of higher education in Maharashtra, and (ii) to estimate the demand for and supply of seats for higher learning by the year 2001 and estimate the resource requirements for meeting this demand.

Methodology: Five hundred and forty institutes of higher education were surveyed. Responses were received from 42 colleges and seven universities in the State. The students were also surveyed from these colleges. Structured questionnaires for principals and students were used as tools to collect data. The collected data were treated with averages and percentages.

Major Findings: (1) Low levels of capital expenditure, inadequate funds from the government, etc., had damaging effects on the quality of education provided in institutions of higher education. (2) The resource shortage had affected science colleges more than commerce colleges. (3) The student—teacher ratio and per student expenditure on the one hand and standard of output and academic achievement of students on the other were positively associated. (4) Similarly, experience of teachers and capital expenditure in particular and total expenditure in general, by the colleges were also positively associated with academic achievements. (5) The unit cost of higher education in Maharashtra was estimated to be Rs 1,719. (6) There appeared to be a U-shaped relationship between the unit on the one hand and the faculty strength on the other. (7) On the whole, the study concluded that institutions of higher education in Maharashtra were suffering from a severe financial crunch which has implications for the quality of higher education. [NR 1241]

Mathew, E.T. 1988. **A study on the financing of college education in the private sector in Kerala.** Independent study. Univ. of Kerala. (ICSSR Funded)

Problem: The study addresses itself to the problem of financing of private colleges in Kerala.

Objectives: (i) To identify and evaluate various sources—institutional and non-institutional, public and private—of finance and the trend and pattern of financing of colleges in the private sector in Kerala, (ii) to examine the changes in the pattern and trend of expenditure with a view to assessing their significance in relation to the goals of higher education, and (iii) to discuss the relationship, if any, which exists between financing and academic performance as adjudged by the qualification of teachers and examination results.

Methodology: Twenty-five arts and science colleges of Kerala constituting 19% of the colleges in the private sector in the State were surveyed. These colleges were selected from different regions. They were managed by different managements. The data about the finances and performance of the colleges pertained to the period 1972-73 to 1985-86. The data were treated with average and percentages.

Major Findings: (1) The State Government was the most prominent source of financing of colleges in Kerala, meeting 90% of the total expenditure. The University Grants Commission and the college management ranked next in supplying the necessary funds. The university of the region contributed a very small percentage of the expenditures of colleges. (2) Salaries both of teaching and non-teaching staff, were the most dominant component of college expenditure. In the course of about a decade, the average salary grant from the state increased more than 10 times. (3) Scholarship and stipends were the next important items. The State Government grant for this head had been declining over a period of time. The library, laboratory and maintenance grant from the State constituted less than 1% of the total. (4) The management of the colleges made substantial contributions initially for the non-recurring expenditure particularly on purchase of land, construction of building, development of laboratory, etc. (5) The University Grants Commission, though having a small share in financing the expenditures of colleges, was increasing in

importance. (6) The non-institutional finance for private colleges, fees, donations and miscellaneous receipts were picking up though their share in the total college finances was still small. (7) Donations received by the colleges from the staff, students, parents and general public had a relatively low share. (8) The capital expenditures of the colleges had increased nearly five times in the course of 14 years from 1972-86. Similarly, the recurring expenditure had also increased quite significantly though not at the same pace as the capital expenditure. (9) In view of the major outgo on staff salaries, the colleges in Kerala were not able to spend much on development. In fact, the deterioration in higher education in the State can be attributed to unionisation and the method of time bound promotion rather than merit based promotion. This would hike the salary bill. (10) Though the performance of some colleges in the State was quite satisfactory, by and large, there was much to be desired in the academic performance of majority of the colleges. [NR 1225]

Mridula. 1991. **Economics of the open learning system: Comparative cost of higher education through IGNOU.** Ph.D., Edu. *Jawaharlal Nehru Univ.*

Problem: The study attempts to examine the efficient use of scarce resources in education by providing a broad comparison of the per student cost of the open learning system and that of the conventional educational system. The IGNOU and University of Delhi were respectively considered for the above purpose.

Objective: (i) To analyse the cost structure of the conventional university system and the open learning system, highlighting their respective limitations, and (ii) to compare the unit cost of education in open learning system and the conventional system with a detailed break-up of unit costs for academic and non-academic activities. (iii) to analyse the size-cost relationship and to determine the optimum enrolment size of the open university with the help of the unit cost

estimates, and (iv) to make suggestions for a more cost effective system of open learning in India with the help of an analysis of the size-cost relationships.

Methodology: The budgets of the universities and colleges for the years 1986-87 to 1989-90 particularly for the Indira Gandhi National Open University and the University of Delhi provided the basic data. The data from four colleges affiliated to Delhi University were used to study the costs at the undergraduate level of the conventional system. The data from the schools of correspondence courses and continuing education were used to study the costs of the open learning system.

Major Findings: (1) The broad cost composition of open learning and conventional learning did not differ, though the subcomponents of costs did differ. (2) The unit cost of the open learning system was relatively lower. However, in view of basic differences such a comparison may not be meaningful. (3) Unit costs and size were related to yield a U-shaped cost curve, suggesting the potential use of this information for efficient use of resources in both systems of learning. [SCG 0161]

Rajaiah, B. 1989. **Private investment in primary education: A study in District Warangal, Andhra Pradesh.** Independent study. *Mancherial Government College.* (ERIC Funded)

Problem: The study examines the role of the private sector in the development of primary education and raises relevant questions pertaining to private participation in primary education with the help of a detailed study of the problems in the sample district.

Objective: To focus attention on quality improvement in primary education with the participation of private management.

Methodology: Various records of the District Education Officer of Warangal District as sources of information were qualitatively analysed.

Major Findings: (1) The private sector controls only a small percentage of primary education in the district, though the number of primary schools under private management increased nearly sixfold during a single year from 1981-82 to 1982-83. (2) In 1971-72, 30% of the primary schools were housed in their own buildings as against 46% in rent free buildings. The rented school buildings constituted 16%. (3) In 1971-72 only 40% of the schools were housed in pucca buildings whereas nearly half of the primary schools were run in thatched temporary sheds. (4) During 1975-76 in Class I children above six years exceeded 69%, i.e. more than half of the children were latecomers, 1.5% of the children were above 10 years of age. (5) Most schools under all types of management had accommodation of less than five rooms. (6) Nearly half the schools in the district had playgrounds of less than one hectare. (7) Only 31 out of 1,142 schools had latrines and urinals in 1975-76. (8) The percentage share of SCs in primary education improved from 11 in 1975-76 to 23 in 1982-83. (9) The enrolment of Scheduled Tribes increased from 3,231 in 1975-76 to 14,478 in 1982-83. Incentives were provided to the children of STs. (10) The share of Listed Backward Classes (LBCs) in primary education was found to be less than their share in the district. (11) During 1975-76 to 1982-83 there had been a spectacular growth in the number of girls enrolled. (12) Most of the teachers working in the district of Warangal were trained teachers (92%). (13) The highest frequency age-group for men teachers was 30-35 while the highest age-group for women teachers was 25-30. (14) Women's participation in teaching was not significant. The average women's participation was 10.5%. (15) 97% of funds come from government. 93% of the direct expenditure was incurred on salaries and allowances of teachers. 87% of the indirect expenditure was incurred on scholarships, stipends and other financial concessions. [MSG 1167]

Reddy, Chandra C. 1988. **The impact of formal education on agricultural income in Andhra Pradesh.** Ph.D., Edu. *Osmantia Univ.*

Problem: The study attempts to analyse the relationship between formal education of the farmers and their agricultural income on the premise that through their education they may have access to the information through mass media and extension, which they might use in decision-making in their agricultural operations and in the adoption of better technology in agriculture.

Objectives: (i) To study the relationship between the formal education of the farmers and their agricultural income, (ii) to study the relationship between exposure to mass media and extension education of the farmers and their agricultural income, (iii) to examine the relationship between the risk-taking behaviour of the farmers and their agricultural income, and

(iv) to study the relationship between the innovative behaviour of the farmers and their agricultural income.

Methodology: One thousand one hundred and fifty farmers drawn from various educational and cultural backgrounds from the two districts of Mehabubnagar and Medak of Andhra Pradesh constituted the sample on which a detailed empirical study was done. Stratified random sampling techniques were adopted in the selection of the sample.

Major Findings: (1) There was a highly significant positive correlation between the formal education of a farmer and his agricultural income. (2) The hypothesis that a higher degree of exposure of the farmers to mass media and extension education and their agricultural incomes were positively correlated had been conformed. [SSS 1034]

Also See

Behera, S.K. 1991. **A study of the institutional costs of university education.** M.Phil., Edu. *Utkal Univ.* [KCP 0496] (See in Chapter 17.)

Chandel, N.P.S. 1992. **A cost-effectiveness analysis of national adult education programme with special reference to the Seventh Five Year Plan.** Ph.D., Edu. *Agra: Dayalbagh Educational Institute.* [GDST 0873] (See in Chapter 29.)

Mohitkar, P.M. 1991. **A critical study of financial management and its implications on development of Agricultural Universities in Maharashtra.** Ph.D., Edu. *Nagpur Univ.* [GPK 1624] (See in Chapter 37.)

Sahoo, C. 1990. **A study of educational planning and finance—Orissa (1951-66).** Ph.D., Edu. *Utkal Univ.* [KCP 0406] (See in Chapter 36.)