

Department of Economics  
Delhi School of Economics  
University of Delhi

**Minutes of Meeting**

**Subject:** Economics of Education (ECON052)  
**Course:** B.A. (Hons) Economics, VI/VIII Semester  
**Credits:** 4  
**Duration (per week):** 4 hours (3 Lectures + 1 Tutorial)  
**Venue:** Room No: 104, Department of Economics  
**Date:** December 17, 2024  
**Chair:** Sandip Datta

The meeting was attended by the following teachers

Sl No	Name	College
1	Apoorva Gupta	Hansraj College
2	Kartikeya Kohli	Aryabhatta College

The meeting involved a comprehensive discussion of different aspects of the course itself, including teaching and the evaluation process for the current semester. The committee reached a consensus on the following points

**Course Description and Course Objectives**

This course discusses the economic aspects of current issues in education, using both economic theory and econometric tools. Topics include a discussion of basic human capital theory, production of education, costing and finance of education, the growing impact of education on earnings and earnings inequality, the labour market for teachers, implications of the introduction of technology (computers) on education, the effectiveness of mid-career training for adult workers, the roles of school choice, and educational outcomes and inequality in demand for education and educational outcomes.

**Course Learning Outcomes**

Since education is a crucial component for the sustainable development of a poor country, the emphasis in this course is laid on understanding the theoretical aspects of education and linking it with education issues in a developing country like India. This course will develop skills among the students to conduct research and analysis in the economics of education.

**Prerequisites:** Basic knowledge of microeconomics, statistics and econometrics

## Course Outline

**1. The Role of Education in Human Development** (12 Lectures): Macro issues in education, human capital theory, returns to education, signalling theory, education and labour market outcomes, costs and benefits of education, education production analysis and early childhood education.

- Hanushek, Eric A., 2005, *Economic Outcomes and School Quality*, International Academy of Education and International Institute for Educational Planning. (Chapters–1,2,3 and 4)
- Becker, G. S. (2009). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- Bradley, S., & Green, C. (Eds.). (2020). *The Economics of Education: A Comprehensive Overview* (Ch13, 14, 15 and 17)
- Ronald G., Ehrenberg and Robert S., Smith. *Modern Labor Economics: Theory and Public Policy*, 11<sup>th</sup> edition, Addison Wesley, Ch9

The next three units of the syllabus are based on basic knowledge of research design, identification strategy, selection problem and econometric analysis. The students are expected to know multivariate regression models, limited dependent variables, and the basic concept of instrumental variables. Applications related to the economics of education covered in the next three units can be considered for evaluation based on knowledge of the application of econometrics. Suggested readings for this are as follows:

- Gujarati, D. N. (2009). *Basic Econometrics*, Ch 7, 8 and 15
- Angrist, J. D., & Pischke, J. S. (2009). *Mostly harmless econometrics: An empiricist's companion*. Princeton University Press. Ch 2 and 4
- Cunningham, S. (2021). *Causal inference: The mixtape*. Yale University Press.

**2. Analysis of School Education** (14 Lectures): Challenges, educational interventions and attainments, financing, accountability and standards

- Hanushek, Eric A., (2005), *Economic Outcomes and School Quality*, International Academy of Education and International Institute for Educational Planning. (Chapters–5,to11)
- Altinok, Nadir, and Geeta Kingdon. "New evidence on class size effects: A pupil fixed effects approach." *Oxford Bulletin of Economics and Statistics* 74, no. 2 (2012):
- Hanushek, Eric. "The evidence on class size." (1998).
- Bradley, S., & Green, C. (Eds.). (2020). *The Economics of Education: A Comprehensive Overview*, Chapter24

- Cristia, Julian, Alejo Czerwonko, and Pablo Garofalo. "Does technology in schools affect repetition, dropout and enrollment? Evidence from Peru." *Journal of Applied Economics* 17, no.1(2014):89-111.
- Kingdon, G.G. (2020). The private schooling phenomenon in India: A review. *The Journal of Development Studies*, 56 (10), 1795-1817
- Abhijit Banerjee, Shawn Cole, Esther Duflo, Leigh Linden. "Remedying Education: Evidence from Two Randomized Experiments in India", *Quarterly Journal of Economics*, 122, No. 3, Aug 2007, Pages 1235–1264.
- Kingdon, G. G., & Teal, F. (2007). Does performance related pay for teachers improve student performance? Some evidence from India. *Economics of Education Review*, 26(4),
- Zhang, W., & Bray, M. (2020). Comparative research on shadow education: Achievements, challenges, and the agenda ahead. *European Journal of education*, 55(3), 322-341.
- Agrawal, A., Gupta, P., & Mondal, D. (2024). Determinants of Private Tutoring Demand in Rural India. *The Journal of Development Studies*, 60(1), 83-107.
- Majumdar, Manabi, "Access, success, and excess Debating shadow education in India", in *Routledge Handbook of Education in India*. Routledge India, (pp.305-316)
- Goldin, C., & Katz, L. F. (2010). *The race between education and technology*. Harvard university press.

### **3. Higher Education and Training (4 Lectures):** Issues of higher education in India, role of internship and apprenticeship in improving labour market outcomes

- In *Routledge Handbook of Education in India*, Routledge India. (Pages 217 to 242, 276-292)
- Bradley, S., & Green, C. (Eds.). (2020). *The Economics of Education: A Comprehensive Overview* (Ch40)
- Silva, P., Lopes, B., Costa, M., Melo, A. I., Dias, G. P., Brito, E., & Seabra, D. (2018). The million-dollar question: can internships boost employment? *Studies in Higher Education*, 43(1), 2-21.

### **4. Education and Inequality (15 Lectures):** Inequality in uptake and outcomes and the role of affirmative action.

- Afridi, F., Barooah, B., & Somanathan, R. (2020). Designing effective transfers: Lessons from India's school meal program. *Review of Development Economics*, 24(1)
- Afridi, F., Barooah, B., & Somanathan, R. (2020). Improving learning outcomes through information provision: Experimental evidence from Indian villages. *Journal of Development Economics*, 146, 102276

- Tholen, G., Brown, P., Power, S., & Allouch, A. (2013). The role of networks and connections in educational elites' labour market entrance. *Research in Social Stratification and Mobility*, 34, 142-154
- Varughese, A. R., & Bairagya, I. (2021). Interstate variation in household spending on education in India: Does it influence educational status?. *Structural Change and Economic Dynamics*, 59,
- Kingdon, G. G. (2007). The progress of school education in India. *Oxford Review of Economic Policy*, 23(2), 168-195
- Borooah, V. K. (2012). Social identity and educational attainment: the role of caste and religion in explaining differences between children in India. *Journal of Development Studies*, 48(7), 887-903.
- Chin, A. (2005). Can redistributing teachers across schools raise educational attainment? Evidence from Operation Blackboard in India. *Journal of development Economics*, 78(2), 384-405.
- Muralidharan, K., & Prakash, N. (2017). Cycling to school: Increasing secondary school enrollment for girls in India. *American Economic Journal: Applied Economics*, 9(3), 321-350.

### **Course Assessment:**

- Continuous Assessment: Students are expected to write a term paper and present their papers individually under the guidance of the teacher
- Internal assessment: There will be three tests/assignments
- End-term exam: There will be 10 questions for 10 marks each. Students have to attempt any nine questions

Following is the suggested list of books/papers, which can be updated with more recent papers as and when they become available.

- Hanushek, E. A., Machin, S. J., & Woessmann, L. (Eds.). (2016). *Handbook of the economics of education*. Elsevier.
- Bradley, S., & Green, C. (Eds.). (2020). *The Economics of Education: A Comprehensive Overview*, Ch 21 (Pages 291-295 and Conclusion)
- Becker, G. S. (2009). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago press.
- Altinok, Nadir, and Geeta Kingdon. "New evidence on class size effects: A pupil fixed effects approach." *Oxford Bulletin of Economics and Statistics* 74, no. 2 (2012): 203-234.

- Abhijit Banerjee, Shawn Cole, Esther Duflo, Leigh Linden. “Remedying Education: Evidence from Two Randomized Experiments in India”, *Quarterly Journal of Economics*, 122, No. 3, Aug 2007, Pages 1235–1264.
- Bradley, S., & Green, C. (Eds.). (2020), *The Economics of Education: A Comprehensive Overview*
- Ronald G., Ehrenberg and Robert S., Smith. *Modern Labor Economics: Theory and Public Policy*, 11<sup>th</sup> edition, Addison Wesley
- Hanushek, Eric A., 2005, *Economic Outcomes and School Quality*, International Academy of Education and International Institute for Educational Planning.
- Majumdar, M. (2017). Access, success, and excess: Debating shadow education in India. In *Routledge Handbook of Education in India* (pp. 273-284). Routledge India.
- Goldin, C., & Katz, L. F. (2010). *The race between education and technology*. Harvard university press.
- Kingdon, G. G., & Teal, F. (2007). Does performance related pay for teachers improve student performance? Some evidence from India. *Economics of Education Review*, 26(4), 473-486.
- Kingdon, G. G. (2020). The private schooling phenomenon in India: A review. *The Journal of Development Studies*, 56(10), 1795-1817.
- Varughese, A. R., & Bairagya, I. (2021). Interstate variation in household spending on education in India: Does it influence educational status?. *Structural Change and Economic Dynamics*, 59, 405-415.
- Afridi, F., Barooah, B., & Somanathan, R. (2020). Designing effective transfers: Lessons from India’s school meal program. *Review of Development Economics*, 24(1), 45-61.
- Afridi, F., Barooah, B., & Somanathan, R. (2020). Improving learning outcomes through information provision: Experimental evidence from Indian villages. *Journal of Development Economics*, 146, 102276.
- Cullen, Julie Berry, Brian A Jacob, and Steven Levitt (2006) ‘The effect of school choice on participants: Evidence from randomized lotteries.’ *Econometrica* 74(5), 1191–1230
- Kingdon, G. G. (2007). The progress of school education in India. *Oxford Review of Economic Policy*, 23(2), 168-195
- Borooah, V. K. (2012). Social identity and educational attainment: the role of caste and religion in explaining differences between children in India. *Journal of Development Studies*, 48(7), 887-903.
- Chin, A. (2005). Can redistributing teachers across schools raise educational attainment? Evidence from Operation Blackboard in India. *Journal of development Economics*, 78(2), 384-405.
- Tholen, G., Brown, P., Power, S., & Allouch, A. (2013). The role of networks and connections in educational elites’ labour market entrance. *Research in Social Stratification and Mobility*, 34, 142-154.

- Silva, P., Lopes, B., Costa, M., Melo, A. I., Dias, G. P., Brito, E., & Seabra, D. (2018). The million-dollar question: can internships boost employment?. *Studies in Higher Education*, 43(1), 2-21.

### **Background Readings for Term paper:**

- Angrist, Joshua D., and Victor Lavy. "Using Maimonides' rule to estimate the effect of class size on scholastic achievement." *The Quarterly Journal of Economics* 114, no. 2 (1999): 533-575.
- Hanushek, Eric A. "Assessing the effects of school resources on student performance: An update." *Educational evaluation and policy analysis* 19, no. 2 (1997a): 141-164.
- Hanushek, Eric A. "Outcomes, incentives, and beliefs: Reflections on analysis of the economics of schools." *Educational Evaluation and Policy Analysis* 19, no. 4 (1997b): 301-308.
- Hattie, John. "The paradox of reducing class size and improving learning outcomes." *International journal of educational research* 43, no. 6 (2005): 387-425.
- Blatchford, P., & Mortimore, P. (1994). The issue of class size for young children in schools: What can we learn from research?. *Oxford review of education*, 20(4), 411-428.
- Haveman, R., & Smeeding, T. (2006). The role of higher education in social mobility. *The Future of children*, 125-150.
- Singh, A., Park, A., & Dercon, S. (2014). School meals as a safety net: an evaluation of the midday meal scheme in India. *Economic Development and Cultural Change*, 62(2), 275-306.
- Ghosh, P., & Bray, M. (2018). Credentialism and demand for private supplementary tutoring: A comparative study of students following two examination boards in India. *International Journal of Comparative Education and Development*.
- Gandhi Kingdon, G. (2002). The gender gap in educational attainment in India: How much can be explained?. *Journal of Development Studies*, 39(2), 25-53.
- Azam, M., & Kingdon, G. G. (2013). Are girls the fairer sex in India? Revisiting intra-household allocation of education expenditure. *World Development*, 42, 143-164.
- Azam, M., & Kingdon, G. G. (2015). Assessing teacher quality in India. *Journal of Development Economics*, 117, 74-83.
- Asadullah, M. N. (2005). The effect of class size on student achievement: Evidence from Bangladesh. *Applied Economics Letters*, 12(4), 217-221.
- Wright, E., & Mulvey, B. (2021). Internships and the graduate labour market: how upper-middle-class students 'get ahead'. *British Journal of Sociology of Education*, 42(3), 339-356.
- Deshpande, A. (2005). *Affirmative action in India and the United States*.

- Coate, Stephen, and Glenn C. Loury (1993) 'Will Affirmative Action Policies Eliminate Negative Stereotypes.' *American Economic Review* 83(5), 1220–1240
- Levin, H. M. (2011). The economics of education. *Alb. Gov't L. Rev.*, 4, 394.