Learning and Dynamic Schooling Decisions DSE, UCL (July 2, 2025) Arnaud Maurel (Duke University, apm16@duke.edu)

Aguirregabiria, V. and Jeon, J. (2020), "Firms' Beliefs and Learning: Models, Identification, and Empirical Evidence", *Review of Industrial Organization*, Vol. 56, No. 2, pp. 203-235

Allman, E., Matias, C. and Rhodes, J. (2009), "Identifiability of Parameters in Latent Structure Models with Many Observed Variables", *Annals of Statistics*, Vol. 37, No. 6A, pp. 3099—3132.

Altonji. J. (1993), "The demand for and return to education when education outcomes are uncertain", *Journal of Labor Economics*, Vol. 11, No. 1, pp. 48-83.

Antonovics, K., and Golan, L. (2012), "Experimentation and job choice", Vol. 30, No.2, pp.333-366.

Arcidiacono, P. (2004), "Ability sorting and the returns to college major", *Journal of Econometrics*, Vol. 121, No. 1-2, pp. 343-375.

Arcidiacono, A., Aucejo, E., Maurel, A. and Ransom. T. (2025), "College attrition and the dynamics of information revelation", *Journal of Political Economy*, Vol. 133, No.1, pp. 53-110.

Arcidiacono, P., Hotz, J., Maurel, A., and Romano, T. (2020), "Ex ante returns and occupational choice", *Journal of Political Economy*, Vol. 128, No. 12, pp. 4475-4522.

Arcidiacono, P. and Miller, R. (2011), "Conditional Choice Probability Estimation of Dynamic Discrete Choice Models with Unobserved Heterogeneity", *Econometrica*, Vol. 79, No. 6, pp. 1823-1867.

Ashworth, J., Hotz, J., Maurel, A. and Ransom, T. (2021), "Changes across cohorts in wage returns to schooling and early work experiences", *Journal of Labor Economics*, Vol. 39, No. 4, pp. 931-964.

Bound, J., and Turner, S. (2011). Dropouts and Diplomas: The Divergence in Collegiate Outcomes. *Handbook of the Economics of Education*, *4*, 573-613.

Bunting, J., Diegert, P. and Maurel, A. (2025), "Heterogeneity, uncertainty and learning: Semiparametric identification and estimation", Working paper.

Carneiro, P., Hansen, K. and Heckman, J. (2003), "Estimating Distributions of Treatment Effects with an Application to the Returns to Schooling and Measurement of the Effects of Uncertainty on College Choice", *International Economic Review*, Vol. 44, No. 2, pp. 361-422.

Crawford, G., and Shum, M. (2005), "Uncertainty and Learning in Pharmaceutical Demand", *Econometrica*, Vol. 73, No. 4, pp. 1137 – 1173.

de Paula, A., Gualdani, C., Pastorino, E. and Salgado, S. (2025), "On the identification of models of uncertainty, learning and human capital acquisition with sorting", Working paper.

DeGroot, M. (1970), Optimal Statistical Decisions. New York: McGraw Hill.

Dempster, A., Laird, N. and Rubin, D. (1977), "Maximum Likelihood from Incomplete Data with the EM Algorithm", *Journal of the Royal Statistical Society, Series B*, Vol. 39, No.1, pp. 1-38.

Eckstein, Z., and Wolpin, K. (1989), "Dynamic labour force participation of married women and endogenous work experience", *Review of Economic Studies*, Vol. 56, No. 3, pp. 375-390.

Erdem, T. and Keane, M. (1996), "Decision-making under uncertainty: Capturing dynamic brand choice processes in turbulent consumer goods", *Marketing Science*, Vol. 15, No. 1, pp. 1-20.

Goldin, C. and Katz, L. (2008), *The Race between Education and Technology*. Harvard University Press.

Heckman, J., Lochner, L., and Todd, P. (2006). Earnings functions, rates of return and treatment effects: The Mincer equation and beyond. *Handbook of the Economics of Education*, 1, 307-458.

Hotz, J. and Miller, R. (1993), "Conditional Choice Probabilities and the Estimation of Dynamic Models", *Review of Economic Studies*, Vol. 60, No. 3, pp. 497-529.

James, J. (2012), "Learning and occupational sorting", Working paper.

Larroucau, T., and Rios, I. (2022), "Dynamic college admissions", Working paper.

Miller, R. (1984), "Job matching and occupational choice", *Journal of Political Economy*, Vol. 92, No. 6, pp. 1086-1120.

Pakes, A. (1986), "Patents as options: Some estimates of the value of holding European patent stocks", *Econometrica*, Vol. 54, No. 4, pp. 755-784.

Pastorino, E. (2024), "Careers in firms: The role of learning about ability and human capital acquisition", *Journal of Political Economy*, Vol. 132, No. 6, pp. 1994-2073.

Rust, J. (1987), "Optimal replacement of GMC bus engines: An empirical model of Harold Zurcher", *Econometrica*, Vol. 55, No. 5, pp. 999 – 1033.

Sanders, C. (2014), "Skill accumulation, skill uncertainty, and occupational choice", Working paper.

Stange, K. (2012), "An empirical investigation of the option value of college enrollment", *American Economic Journal: Applied Economics*, Vol. 4, No. 1, pp. 49-84.

Stinebrickner, T., and Stinebrickner, R. (2012), "Learning about academic ability and the college dropout decision", *Journal of Labor Economics*, Vol. 30, No. 4, pp. 707-748.

Stinebrickner, T, and Stinebrickner, R. (2014), "A major in science? Initial beliefs and final outcomes for college major and dropout", *Review of Economic Studies*, Vol. 81, No. 1, pp. 426-472.

Thomas, J. (2019), "The signal quality of grades across academic fields", *Journal of Applied Econometrics*, Vol. 34, No. 4, pp. 566-587.

Wiswall, M. and Zafar, B. (2015), "Determinants of College Major Choice: Identification using an Information Experiment", *Review of Economic Studies*, Vol. 82, No. 2, pp. 791-824.

Wolpin, K. (1984), "An estimable dynamic stochastic model of fertility and child mortality", *Journal of Political Economy*, Vol. 92, No. 5, pp. 852-874.

--

Replication code and data for Arcidiacono et al. (2025) available on Harvard Dataverse (https://doi.org/10.7910/DVN/THF]TZ).