

“Managing Education and Training in Firms/for Firms”

Spring term 2022

Lecturer: Prof. Dr. Samuel Mühlemann, LMU Munich

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Module Number: MOEC0413

ECTS-Points: 3.0

Lectures:

Thursday, 24.3.2022, 12:00-17:00

Monday, 28.3.2022, 12:00-17:00

Thursday, 31.3.2022, 12:00-17:00

Monday, 4.4.2022, 12:00-17:00

Thursday, 7.4.2022, 12:00-17:00

Written exam: Thursday, 5.5.2022, 14:00-15:00

Course website: <http://www.business.uzh.ch/de/professorships/emap/teaching.html>

General description:

This course views education and training in firms from an economic perspective with a particular focus on factors that are exogenous to a firm, such as national labor market institutions and educational policy, or business cycle fluctuation. Moreover, we discuss how a firm can influence the both the effectiveness and efficiency of education and training at the workplace.

Day 1: Thursday, 24.3.2022, 12:00-17:00

1. Labor supply
2. Labor demand
3. Labor market equilibrium
4. Frictional labor markets
5. Human capital theory

Key literature:

Ehrenberg, R. & Smith, R. S. (2014). *Modern Labor Economics, Theory and Public Policy*, 12/e. Pearson.

Bradley, S., & Green, C. (2020). *The Economics of Education*. Academic Press.

Acemoglu, D. & J.S. Pischke (1999). Beyond Becker: Training in imperfect labour markets. *Economic Journal* 108, F112–F142.

Day 2: Monday, 28.3.2022, 12:00-17:00

1. The role of technological change on skills demand and supply: skill-biased technological change and routine-biased technological change
2. Measuring performance at work and its association with training
3. The role of artificial intelligence/machine learning in the context of workplace training

Key literature:

Acemoglu, D., & Restrepo, P. (2019). Automation and new tasks: how technology displaces and reinstates labor. *Journal of Economic Perspectives*, 33(2), 3-30.

Acemoglu, D., & Restrepo, P. (2020). The wrong kind of AI? Artificial intelligence and the future of labour demand. *Cambridge Journal of Regions, Economy and Society*, 13(1), 25-35.

Dauth, W., Findeisen, S., Suedekum, J., & Woessner, N. (2021). The adjustment of labor markets to robots. *Journal of the European Economic Association*, 19(6), 3104-3153.

Muehlemann, S. (2019). *Measuring performance in vocational education and training and the employer's decision to invest in workplace training*. In: Unwin, L. and Guile, D. (eds). *Wiley Handbook on Vocational Education and Training*, 187-206. Hoboken, Wiley Blackwell.

Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and a path forward. *California Management Review*, 61(4), 15-42.

Verhagen, A. (2021). Opportunities and drawbacks of using artificial intelligence for training. OECD Social, Employment and Migration Working Papers No. 266. Paris: OECD. <https://dx.doi.org/10.1787/22729bd6-en>

Day 3: Thursday, 31.3.2022, 12:00-17:00

1. The market for apprentices - why do firms (not) train?
2. Supply and demand
 - a) Effects of a demand shock
 - b) Effects of a supply shock
3. Post-training benefits
 - a) The role of savings on hiring costs for skilled workers
 - b) The role of labor market institutions

Key literature:

Dionisius, R., Muehlemann, S., Pfeifer, H., Walden, G., Wenzelmann, F., & Wolter, S. C. (2009). Costs and Benefits of Apprenticeship Training. A Comparison of Germany and Switzerland. *Applied Economics Quarterly*, 55(1), 7.

Jansen, A., Leiser, M. S., Wenzelmann, F., & Wolter, S. C. (2015). Labour market deregulation and apprenticeship training: A comparison of German and Swiss employers. *European Journal of Industrial Relations* 21(4), 353-368.

Kriechel, B., S. Muehlemann, H. Pfeifer & M. Schuette (2014). Works councils, collective bargaining and apprenticeship training. *Industrial Relations* 53(2), 199-222.

Lüthi, S., & Wolter, S. C. (2020). Are apprenticeships business cycle proof?. *Swiss Journal of Economics and Statistics*, 156(1), 3.

Moretti, L., Mayerl, M., Muehlemann, S., Schlögl, P., & Wolter, S. C. (2019). So similar and yet so different: A firm's net costs and post-training benefits from apprenticeship training in Austria and Switzerland. *Evidence-based HRM: a Global Forum for Empirical Scholarship*, 7(2), 229-246

Muehlemann, S., Dietrich, H., Pfann, G., & Pfeifer, H. (2022). Supply shocks in the market for apprenticeship training. *Economics of Education Review*, 86, 102197.

Muehlemann, S., Pfeifer, H., & Wittek, B. H. (2020). The effect of business cycle expectations on the German apprenticeship market: Estimating the impact of Covid-19. *Empirical Research in Vocational Education and Training*, 12(1), 1-30.

Muehlemann, S., & Leiser, M. S. (2018). Hiring costs and labor market tightness. *Labour Economics*, 52, 122-131.

Muehlemann, S. & S. C. Wolter (2020). *The Economics of Vocational Training*. In: Bradley, S., Green, C. (eds.). *Economics of Education*. 2nd Edition. Academic Press.

Wolter, S.C. & P. Ryan (2011). *Apprenticeship*. Handbook of Economics of Education, Vol. 3, ed. by R. Hanushek, S. Machin, L. Wössmann. Amsterdam: Elsevier North-Holland, 521-576.

Day 4: Monday, 4.4.2022, 12:00-17:00

1. Identifying the returns to VET for individuals over the life cycle
2. How does the threat of poaching affect training markets?
3. Financial incentives for apprentices and training subsidies for firms
4. Apprenticeship training outside the DACH countries

Key literature:

- Brunello, G., & Rocco, L. (2017). The labor market effects of academic and vocational education over the life cycle: Evidence based on a British cohort. *Journal of Human Capital*, 11(1), 106-166.
- Cavaglia, C., McNally, S., & Ventura, G. (2020). Do Apprenticeships Pay? Evidence for England. *Oxford Bulletin of Economics and Statistics*, 82(5), 1094-1134.
- Dougherty, S. M., & Ecton, W. G. (2021). The Economic Effect of Vocational Education on Student Outcomes. In: *Oxford Research Encyclopedia of Economics and Finance*.
- Hanushek, E. A., Schwerdt, G., Woessmann, L., & Zhang, L. (2017). General education, vocational education, and labor-market outcomes over the lifecycle. *Journal of Human Resources*, 52(1), 48-87.
- Malamud, O. & C. Pop-Eleches (2010). General Education Versus Vocational Training: Evidence from an Economy in Transition, *Review of Economics and Statistics*, 92(1), 43–60.
- Mohrenweiser, J., Zwick, T., & Backes-Gellner, U. (2019). Poaching and firm-sponsored training. *British Journal of Industrial Relations*, 57(1), 143-181.
- Muehlemann, S. & S.C. Wolter (2011). Firm-sponsored training and poaching externalities in regional labor markets. *Regional Science and Urban Economics* 41(6), 560-570.
- Muehlemann, S. & Wolter, S. C. (2017). Can Spanish firms offer dual apprenticeships without making a net investment? Empirical evidence based on ex-ante simulations of different training scenarios. *Evidence-based HRM: a global forum for empirical scholarship*, 5(1) 107-118.
- Muehlemann, S., Wolter, S., & Joho, E. (2018). Apprenticeship training in Italy: a cost-effective model for firms? News Skills at Work J.P. Morgan, Fondazione Giacomo Brodolini, Bertelsmann Stiftung.
- Oswald, Y. and Backes-Gellner, U. (2014). Learning for a bonus: How financial incentives interact with preferences. *Journal of Public Economics*, vol. 118: 52-61.
- Papps, K. L. (2020). How the Minimum Wage Affects Training among Apprentices. IZA DP No. 13499. <https://ftp.iza.org/dp13499.pdf>
- Strupler Leiser, M. & Wolter S. C. (2017). Empirical evidence on the effectiveness of social public procurement policy: The case of the Swiss apprenticeship training system. *Labour*, 31(2), 204-222.

Day 5: Thursday, 7.4.2022, 12:00-17:00

1. Informal and non-formal learning and training in the workplace
 - a) Effects of informal and non-formal training on productivity and wages
 - b) Impact of informal and non-formal training on innovation
 - c) Product market competition and training
 - d) The effects of subsidizing workplace training
2. Q&A (entire course)

Key literature:

- Bassanini, A. & G. Brunello (2011). Barriers to entry, deregulation and workplace training: A theoretical model with evidence from Europe. *European Economic Review* 55(8), 1152–1176.
- Backes-Gellner, U., & Lehnert, P. (2021). The Contribution of Vocational Education and Training to Innovation and Growth. In: *Oxford Research Encyclopedia of Economics and Finance*.
- Bilanakos, C., Heywood, J. S., Sessions, J., & Theodoropoulos, N. (2018). Does demand for product quality increase worker training? *Journal of Economic Behavior & Organization*, 155, 159-177.
- Brunello, G., Comi, S. L., & Sonedda, D. (2012). Training subsidies and the wage returns to continuing vocational training: Evidence from Italian regions. *Labour Economics*, 19(3), 361-372.
- Dauth, C. (2020). Regional discontinuities and the effectiveness of further training subsidies for low-skilled employees. *ILR Review*, 73(5), 1147-1184.
- Dostie, B. (2018). The impact of training on innovation. *ILR Review*, 71(1), 64-87.
- Dostie, B. (2015). Do Train-or-Pay Schemes Really Increase Training Levels?. *Industrial Relations: A Journal of Economy and Society*, 54(2), 240-255.
- DeGrip, A. & J. Sauermann (2012). The effects of training on own and co-worker productivity: evidence from a field experiment, *The Economic Journal* 122(560), 376–399
- Leuven, E., & Oosterbeek, H. (2004). Evaluating the effect of tax deductions on training. *Journal of Labor Economics*, 22(2), 461-488.
- Loewenstein, M., and J. Spletzer (1999). Formal and informal training: Evidence from the NLSY. In: Polachek, S., and K. Tatsiramos (eds). *Research in Labor Economics* Volume 18. Bingley: Emerald Group, 1999.
- Schwerdt, G., Messer, D., Woessmann, L. & Wolter, S. C. (2012). The impact of an adult education voucher program: Evidence from a randomized field experiment. *Journal of Public Economics* 96(7-8) 569-583.
- Tamm, M. (2018). Training and changes in job Tasks. *Economics of Education Review*, 67, 137-147.