

Syllabus

Seminar in Empirical Education Economics: Challenges and solutions for developing countries (Master Seminar)

M.WIWI-VWL.0025 | M.WIWI-VWL.0185

Summer Semester 2025

(as of 4th March 2025)

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Office hours: By appointment

1. General information

1.1 Content of the course

Over the last 70 years, developing and emerging countries have made significant progress in school enrollment and various education outcomes. While in the 1950s education was often only reserved for a small, local elite, today most countries achieve primary school enrollment rates of more than 90 percent.

Despite the considerable success of high school enrollment rates, many countries have major problems ensuring the quality of school education. This is particularly evident in the poor learning outcomes of students. After six years of primary school education, many of them only have the learning level of first and second graders.

Against the background of tight national budgets and already high government investments in the education sector, many developing and emerging countries are faced with the question of how to effectively and cost-efficiently improve the quality of school education.

In this seminar, students are introduced to current topics in the empirical economics of education in developing countries. Students should use case studies to examine the extent to which certain policy measures and interventions can represent promising measures to improve school education in the respective country.

1.2 Course objectives

The objectives of the seminar are as follows:

- Acquisition and deepening of basic knowledge regarding empirical education economics, especially problems and solutions in developing countries;
- Training students in scientific work with regard to literature research and the interpretation of scientific articles;
- Training students in the structuring and argumentation of scientific texts;
- Development of a country and topic-specific case study (see appendix);
- Training students in descriptive and multivariate analyzes using the Stata software;
- Presentation of your own study in the seminar and discussion with other students and the lecturer;
- Critical reflection on other students' presentations.

1.3 Prerequisites

Students should at least have already passed Econometrics I (bachelor) or another econometrics class. In fact, we strongly recommend to only attend the seminar if you possess basic knowledge in econometrics. Previous knowledge in Stata is advantageous but not a prerequisite.

1.4 Credits

6 ECTS credits

1.5 Registration

- Please sign up for this course on Stud IP so that you receive all relevant information.
- You need to apply for a seminar place via the central seminar place allocation mechanism in Development Economics. We will provide details via the economics newsletter. You can sign up for the newsletter at <https://www.uni-goettingen.de/en/72737.html>.
- ECTS-LP registration: In order to receive ECTS-LP, students must register for the seminar at FlexNow until Thursday, 24 April 2025.

2. Overview of the course

2.1 Description of teaching and learning methods

In addition to the seminar dates, students are expected to independently familiarize themselves with the relevant topics through active literature research. The introductory event is intended to familiarize students with the topic of the seminar and clarify any administrative questions. In addition, students are trained in the use of the statistical program Stata, which students need to carry out descriptive and multivariate analyzes as part of the respective case study. By independently completing a case study, students demonstrate that they can carry out simple empirical analyzes and write well-structured scientific papers. By presenting their case study, participating in discussions in the seminar and commenting on other students' presentations, seminar participants demonstrate that they can critically engage with empirical work. Students are offered the opportunity to participate virtually in two question and answer (Q&A) sessions to discuss work progress with the instructor and other course participants. **The seminar will be held in English.**

2.2 Schedule

Registration for the seminar

- Students should register in advance for the seminar via Stud IP by **April 15, 2025**;
- Students should register via FlexNow by **April 24, 2025** in order to be able to receive ECTS-LP credits.

Introductory event. Date (Thursday, 17 April 2025, 2:00 p.m. - 4:00 p.m. c.t, see EXA for room)

- Introduction to the topic of empirical education economics in developing countries;
- Distribution of topics (topics are listed in the appendix).

Introduction to Stata (Thursday, 17 April 2025, 4:00 p.m. - 7:00 p.m. c.t., room (see EXA))

- General structure;
- Reading data and cleaning data;
- Descriptive and multivariate statistics and graphs.

Questions and answers (Q&A) Part 1 (Thursday, 24 April, 5:00 p.m. - 6:00 p.m. c.t., via Zoom)

- Interactive session in which students have the opportunity to discuss their problems, questions and ideas with each other and with the lecturer;
- Feedback from the lecturer.

Questions and answers (Q&A) part 2 (Wednesday, 30 April 2025, 5:00 p.m. - 6:00 p.m. ct, via Zoom)

- Interactive session in which students have the opportunity to discuss their problems, questions and ideas with each other and with the lecturer + Feedback from the lecturer

Deadline for drafting your own presentation (Monday, 12 May 2025, 11:59 p.m.)

An electronic version of your own presentation (in PDF format) must be uploaded to StudIP so that other students have the opportunity to discuss the case study assigned to you.

Presentation of the case study: (Thursday, 15 May 2025, 2:00 p.m. - 6:00 p.m. c.t. and Friday, 16 May 2025, 9:00 a.m. - 4:00 p.m. c.t., see EXA for room)

Each student presents the first version of their own case study and comments on the case study of two other students. It is expected that appropriate slides will be prepared for the presentation of your own case study. There is no need to create your own slides to discuss other students' case studies. Your own presentation should last around 20 minutes, while the discussion of other students' studies should not last longer than around 5 minutes per study. A total of 45 minutes are planned for each case study (20 minutes of lecture, 10 minutes of student comments and 15 minutes for general discussion).

Deadline for the final case study (Monday, 16 June 2025, 11:59 p.m.)

The final case study should be uploaded as a PDF via StudIP by June 16, 2025. In addition, the final files used to create the descriptive and multivariate statistics must also be uploaded via StudIP (Stata .do and .dta files and raw data).

Zoom link for online meetings (see below)

<https://uni-goettingen.zoom-x.de/j/68282326858>

Meeting ID: 682 8232 6858

2.3 Examination and evaluation of the modules

The final grade consists of three components

- Case study [75%]
- Presentation of your own Case study [20%]
- Discussion of Case Studies from two other seminar participants [5%]

In order to pass the course, seminar participants must also:

- Be present on all seminar days and actively participate in the event;
- Submit all seminar work (slides for your own presentation and your own case study) on time;
- Achieve at least a grade of 4.0 for the case study;
- Achieve at least a grade of 4.0 in the weighted average of all components.

2.4 Course Materials

Overview articles and reports---Examples:

- Bold, T., D. Filmer, G. Martin, E. Molina, B. Stacy, C. Rockmore, J. Svensson and W. Wane (2017). Enrollment without learning: Teacher effort, knowledge, and skill in primary schools in Africa. *Journal of Economic Perspectives* 31(4): 185–204
- Damon, A., P. Glewwe, S. Wisniewski, and B. Sun. (2019), What educational policies and programs affect learning and time in school in developing countries? A review of evaluations from 1990 to 2014. *Review of Education* 7: 295-387.
- Evans, D.K. and A. Popova (2016). What Really Works to Improve Learning in Developing Countries? An Analysis of Divergent Findings in Systematic Reviews. *World Bank Research Observer* 31(2): 242-270
- Glewwe, P. and K. Muralidharan (2016). Chapter 10 – Improving education outcomes in developing countries: Evidence, knowledge gap, and policy implications. *Handbook of the Economics of Education* 5: 653-743. Editors: EA Hanushek, S. Machin and L. Woessmann. Elsevier Publishers.
- Glewwe, P., E. A. Hanushek, S. Humpage and R. Ravina. (2013). Chapter 2 – School resources and educational outcomes in developing countries: A review of the literature from 1990 to 2010. *Education Policy in Developing Countries*. Editor: P. Glewwe. University of Chicago Press.
- Hanushek, EA and L. Woessmann (2008). The role of cognitive skills in economic development. *Journal of Economic Literature* 46(3): 607-688.
- Mbiti, IM (2016). The need for accountability in education in developing countries. *Journal of Economic Perspectives* 30(3): 109-132.
- Snilstveit, B., J. Stevenson, R. Menon, D. Philips, E. Gallagher, M. Geleen, H. Jobse, T. Schmidt and E. Jimenez (2017) The impact of educational programs on learning and school participation in low- and middle-income countries. *3ie – Systematic Review Summary* 7.
- World Bank. (2018). World Development Report 2018: LEARNING to realize education's promise. World Bank, Washington, DC.
- World Bank (2004). World Development Report 2004: Making services work for the poor. World Bank. Washington, D.C.

Recommended reading for those who need to teach themselves basic STATA skills:

- Cameron, Colin A. and Pravin K. Trivedi (2010). *Microeconometrics Using Stata* (revised edition). Stata Press.
- Kohler, Ulrich and Frauke Kreuter (2016). *Data analysis with Stata : general concepts of data analysis and their practical application* (5th edition). Walter de Gruyter.
- Online tutorial: <https://data.princeton.edu/stata/>

Recommended literature as a guide for writing seminar papers:

- Dierkes, S. (2020). Guidelines for the preparation of scientific papers. Georg-August-University Goettingen. Professorship for Finance and Controlling. Web link: <https://www.uni-goettingen.de/de/document/download/8a079027a7ceae4bd2ef6c435fd0124f.pdf/Leitfaden2020.pdf>. Accessed May 19, 2023.
- Koch, K. (2021). Instructions for writing a term paper. Georg-August-University Goettingen. Institute of Education Science. Web link: <https://www.uni-goettingen.de/de/34315.html>. Accessed May 19, 2023.
- Noack, EM and B. Heinrich (2013). Guide to designing and writing academic papers. Georg-August-University Goettingen. Faculty of Agricultural Sciences. Web link: <https://www.uni-goettingen.de/de/document/download/8a079027a7ceae4bd2ef6c435fd0124f.pdf/Leitfaden2020.pdf>. Accessed May 19, 2023.

3. Case Study Requirements

The case study should be a maximum of 15 pages. Tables and graphics are included in the page number. In contrast, the following do not count towards the calculation of the number of pages: title page, table of contents, bibliography, appendix. The text of the case study should have a font size of 12pt (Times New Roman) and a line spacing of 1.5. The side distances should be 2.5cm each (top, bottom, left, right). Appendices should include details of data and data analysis as well as tables/graphs with background information. Tables and graphs that are essential to the structure of the argument should appear in the main body of the work. The case study is expected to use a consistent citation style.

Every idea, statement, and fact that comes from another literary source must be correctly cited and cited. Plagiarism will be sanctioned with a grade of 5 (fail). The general rules of the Faculty of Economics apply (see “Information sheet on the preparation of final theses” on the website: <https://www.uni-goettingen.de/de/abendarbeiter/574058.html>). This includes, among other things, that your own Case study has the following signed declaration: "I certify that I completed the work independently and without using any aids other than those specified. All passages that are taken literally or essentially from publications or other sources are identified as such. The written and electronic form of the work agree”.

Footnotes can be used while endnotes are not allowed. The citation style should correspond to one of the common variants in economic literature. An example of this is the so-called citation style according to the Harvard system. All sources that have been cited must be listed in the reference list. The bibliography should not contain any sources that have not been cited.

A good case study should have the following characteristics:

- Clear structure in terms of structure, language and argumentation logic
- Detailed and systematic evaluation of the relevant literature

- Meaningful integration of the empirical analyzes into the context of the case study
- Comprehensible policy recommendation(s)
- Ensuring objectivity and replicability

Furthermore, the case study must be written in German and independently by the individual student. The lecturer only gives advice on the structure and solution of any problems /questions.

Analyzes with Stata : When submitting the homework, all files that were used for the analyzes and are necessary for the replicability of the results must be submitted. This includes the following files: original data (raw data) and the cleaned datasets, Stata .do and .log files. There should also be a .do file that explains all data sets and program files. When analyzing with Stata , care should be taken to ensure that paths are coded in such a way that the results can be reproduced quickly ('soft coding ').

Annex 1

No	Theme	country	Article example	Records
1	Increasing demand for education among parents	Mexico	Barrera-Osorio, F., Gertler, P., Nakajima, N. and Patrinos, H. 2021. Promoting Parental Involvement in Schools: Evidence from Two Randomized Experiments. <i>RISE Working Paper</i> .	Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH). Web link: https://www.inegi.org.mx/programas/enigh/nc/2018/
2	Kindergarten and preschool programs	Indonesia	Nakajima, N., A. Hasan, H. Jung, S. Brinkman, M. Pradhan and A. Kinnell (2019). " Investing in school readiness: A comparison of different early childhood education pathways in rural Indonesia ," <i>International Journal of Educational Development</i> , Elsevier 69: 22-38.	Demographic and Health Surveys (DHS) Web link: https://dhsprogram.com/
3	(Management) training for school principals	Brazil	Henriques, R., M. de Carvalho and RP de Barros (2020). Impact evaluation in education: The successful experience of the Jovem de Futuro program in partnership with the government. <i>Report</i> .	Pesquisa Nacional por Amostra de Domicílios Continua Annual Web link: https://dados.gov.br/dataset/pesquisa-nacional-por-amostra-de-domicilios-continua-anual-pnadc-a
4	Further education and training of teachers	South Africa	Ciliers, J., B. Fleisch, C. Prinsloo, and S. Taylor (2019). How to improve teaching practice? An experimental comparison of centralized training and in-classroom coaching. <i>Journal of Human Resources</i> 55(3): 926-962.	Demographic and Health Surveys (DHS) Web link: https://dhsprogram.com/
5	Income incentives for teachers in unattractive schools	Gambia	T. Pugatch and E. Schroeder. (2014). Incentives for teacher relocation: Evidence from the Gambian hardship	Demographic and Health Surveys (DHS) Web link: https://dhsprogram.com/

			allowance. <i>Economics of Education Review</i> 41: 120-136.	
6	Performance-based contract structures for teachers	India	K. Muralidharan and V. Sundararaman (2013). Contract teachers: Experimental evidence from India. <i>NBER working paper no. 19440</i> .	Demographic and Health Surveys (DHS) Web link: https://dhsprogram.com/
7	Income incentives for teachers	China	Loyalka , P., S. Sylvia, C. Liu, J. Chu and Y. Shi (2019). Pay by design: Teacher performance pay design and the distribution of student achievement. <i>Journal of Labor Economics</i> 37(3): 621-662	China Family Panel Studies Web link: https://opendata.pku.edu.cn/dataverse/CFPS?language=en
8th	Performance-related pay for schools	Chile	D. Contreras and T. Rau (2012).Tournament Incentives for Teachers: Evidence from a Scaled-Up Intervention in Chile. <i>Economic Development and Cultural Change</i> 61(1): 219-246	Encuesta Casen Web link: http://observatorio.ministeriodesarrollosocial.gob.cl/encuesta-casen-2017
9	Involvement of members of municipalities	Indonesia	Pradhan, M., D. Suryadarma , A. Beatty, M. Wong, A. Gaduh, A. Alisjahbana and RP Artha (2014). Improving educational quality through enhancing community participation: Results from a randomized field experiment in Indonesia. <i>American Economic Journal: Applied Economics</i> 6(2): 105-126.	Demographic and Health Surveys (DHS) Web link: https://dhsprogram.com/
10	Involvement of parents (parental committees / associations)	Bangladesh	Islam, A. (2019). Parent–teacher meetings and student outcomes: Evidence from a developing country. <i>European Economic Review</i> 111: 273-304.	Demographic and Health Surveys (DHS) Web link: https://dhsprogram.com/
11	Educational programs and software for children	India	Muralidharan , K., A. Singh and A. J. Ganimian (2019). Disrupting education? Experimental evidence on technology-	Demographic and Health Surveys (DHS) Web link: https://dhsprogram.com/

			aided instruction in India. <i>American Economic Review</i> 109 (4): 1426-1460.	
12	Hygiene practices/ facilities at school	Nepal	Oster, E. and R. Thornton. (2011). Menstruation, Sanitary Products, and School Attendance: Evidence from a Randomized Evaluation. <i>American Economic Journal: Applied Economics</i> , 3 (1): 91-100.	Demographic and Health Surveys (DHS) Web link: https://dhsprogram.com/
13	Improving school infrastructure	Kenya	Glewwe , P., M. Kremer and S. Moulin (2009). Many children left behind? Textbooks and test scores in Kenya. <i>American Economic Journal: Applied Economics</i> 1(1): 112-135.	Demographic and Health Surveys (DHS) Web link: https://dhsprogram.com/
14	Inclusion of private educational providers	Pakistan	Romero, M., J. Sandefur , and W. A. Sandholtz . (2020). "Outsourcing Education: Experimental Evidence from Liberia." <i>American Economic Review</i> , 110(2): 364-400.	Demographic and Health Surveys (DHS) Web link: https://dhsprogram.com/
15	Conditional Cash Transfer (CCT) programs	Columbia	Barrera-Osorio, F., Linden, L., & Saavedra, J. (2019). Medium- and long-term educational consequences of alternative conditional cash transfer designs: experimental evidence from Colombia. <i>American Economic Journal, Applied Economics</i> 11(3): 54-91	Gran Encuesta Integrada de Hogares Web link: http://microdatos.dane.gov.co/index.php/catalog/MICRODATOS/about_collection/23/1