

# Jahrestagung

Bildungsökonomischer Ausschuss 2022

10./11. März 2022

Generalthema: Bildung und demografischer Wandel

Organisation: Kerstin Schneider und C. Katharina Spieß

Tagungsort: virtuell und lokale Clustertreffen (beim BiB Wiesbaden)

## Programm

Donnerstag, den 10. März 2022

09:00 Uhr	Begrüßung und Vorstellung BiB
09:30 Uhr	<b>Isphording, Ingo (IZA Bonn)</b> <i>Schools and Corona – Evidence from staggered summer breaks in Germany</i>
10:30 Uhr	Kaffeepause
10:45 Uhr	<b>Hermes, Henning (DICE Düsseldorf)</b> <i>Early child care and maternal labor supply: A field experiment</i>
11:45 Uhr	<b>Peter, Frauke (DZW Hannover)</b> <i>Gender Gaps in Pre-College Wage Expectations: What Drives Differential Beliefs about Future Earnings?</i>
12:30 Uhr	Mittagspause
13:30 Uhr	<b>Backes-Gellner, Uschi (Universität Zürich)</b> <i>Differences in Hard and Soft Skill Depreciation and the role of lifelong learning for labor market outcomes</i>
14:15 Uhr	<b>Keynote: Lutz, Wolfgang (Wittgenstein Centre for Demography and Global Human Capital, IIASA, OeAW, University of Vienna)</b> <i>The demography of human capital formation and global sustainable development</i>
15:15 Uhr	Kaffeepause
15:30 Uhr	Mitgliederversammlung

Freitag, den 11. März 2022

09:15 Uhr	<b>Schunk, Daniel (Johannes Gutenberg Universität Mainz)</b> <i>Self-regulation Training in Primary Schools Improves Academic Achievements and Long-Term Educational Career Paths</i>
10:00 Uhr	<b>Pfeiffer, Friedhelm (ZEW Mannheim)</b> <i>The Evolution of Educational Wage Differentials for Women and Men, from 1996 to 2019</i>
10:45 Uhr	<b>Poster Session/Kaffee</b> <b>Lergetporer, Philipp</b> <i>Discrimination on the Child Care Market: A Nationwide Correspondence Study</i> <b>Wößmann, Ludger</b> <i>Can Mentoring Alleviate Family Disadvantage in Adolescence? A Field Experiment to Improve Labor-Market Prospects</i> <b>Backes-Gellner, Uschi</b> <i>How IT progress affects the returns to specialization and social skills</i> <b>Zierow, Larissa</b> <i>Should Schools Grade Student Behavior? Quasi-Experimental Evidence from Compartment Grade Reforms</i> <b>Schneider, Kerstin</b> <i>Tuition fees and academic (in)activity in higher education</i>  Vorstellung der Poster mit einem Poster-Pitch in Zoom; anschließende Diskussion der Poster in Wonder.me (siehe unten)
11:45 Uhr	<b>Schweri, Jürg (Eidgenössische Hochschule für Berufsbildung EHB)</b> <i>Too young to choose? Students' age and choice of vocational versus general education</i>
12:30 Uhr	<b>Huebener, Matthias (DIW Berlin)</b> <i>Does schooling affect longevity? Evidence from death records</i>
13:15 Uhr	Verabschiedung

## Abstracts

(Vortragende sind hervorgehoben)

### **Donnerstag, 10. März 2022**

Marc Diederichs / Reyn Joris van Ewijk / **Ingo Isphording** / Nico Pestel

#### *Schools and Corona – Evidence from staggered summer breaks in Germany*

We use event study models based on staggered summer vacations in Germany to estimate the effect of school re-openings after the summer breaks of 2020 and 2021 on the spread of SARS-CoV-2. Estimations are based on daily counts of confirmed coronavirus infections across all 401 German counties. Contrary to widely-held beliefs, we find a containing effect of school re-openings on case numbers which we attribute to regular testing and behavioral changes of parents and students. For 2021, our results are consistent with mandatory testing contributing to the containment of the viral spread. We find a short-term increase in infection rates right after summer breaks, indicating the uncovering of otherwise undetected (asymptomatic) cases through the testing. After a period of about 2 weeks after school re-openings, the growth of case numbers is smaller in states which re-opened schools compared to the control group of states still in summer break. The results show a similar pattern for older age groups as well, arguably as a result of detected clusters through the school testing. This means that under certain conditions open schools can play a role in containing the spread of the virus. Our results suggest that closing schools as a means to reduce infections may have unintended consequences by giving up surveillance and should be considered only as a last resort.

**Henning Hermes** / Marina Krauß / Philipp Lergetporer / Frauke Peter/ Simon Wiederhold

#### *Early child care and maternal labor supply: A field experiment*

We provide direct experimental evidence on the effects of universal early child care on maternal full-time employment. We leverage an RCT in Germany which had large positive effects on child care enrollment for families with lower socioeconomic status (SES) and find a large positive treatment effect on full-time employment of lower-SES mothers: Eighteen months after the treatment, when children are aged 2-3years, the treatment increased lower-SES mothers' full-time employment by 9 percentage points, which corresponds to a 160-percent increase compared to the control group. Additionally, lower-SES mothers' household income increases by 10 percent.

Andreas Leibing / **Frauke Peter** / Sevrin Waights / C. Katharina Spiess

*Gender Gaps in Pre-College Wage Expectations: What Drives Differential Beliefs about Future Earnings?*

Using data from a unique survey of German high school graduates, we document a gender gap in expected future earnings (assuming full-time employment at age 35) of more than 15%. We decompose this gender gap into components attributable to sociodemographic factors, academic achievement and ability, intended field of study, career motives, personality traits, and measures of student confidence. The results suggest that anticipated child penalties play a main role in determining female wage expectations, while men are little affected by such considerations. Women expect child penalties mainly through lower maximum wage expectations and for occupations associated with higher educational attainment. Our results suggest that women anticipate labor market discrimination already at high school graduation and possibly to a greater extent than suggested by the existing literature. In particular in the light of a potential shrinkage of the labor force, the found expectations of high school graduates are likely to affect starting wages and to have a persistent effect on future wages and retirement income developments as well as altered human capital investments.

Tobias Schultheiss / **Uschi Backes-Gellner**

*Differences in Hard and Soft Skill Depreciation and the role of lifelong learning for labor market outcomes*

This project examines the role of lifelong learning in counteracting skill depreciation and obsolescence. We build on findings showing that different skill types have structurally different depreciation rates. We differentiate between occupations with more hard or more soft skills and measure the relative importance of these two skill types based on job advertisements. As data source we use the Swiss Job Market Monitor, a representative data set covering the job market in high detail across occupations (from 1950-2019) and enabling us to capture skill requirements in occupations at a granular level. In particular, we draw on a categorization of occupational skill requirements into hard and soft skills through a machine-learning algorithm. Furthermore, we use individual-level data on lifelong learning participation and labor market outcomes from the Swiss Microcensus of Continuing Education. We analyze effects of lifelong learning for “harder” occupations (i.e., with relatively more hard than soft skills) versus “softer” occupations, thereby shedding light on the role of training in counteracting skill depreciation in occupations that are “more” versus “less” affected by skill depreciation. Our results reveal important patterns of skill depreciation and counteracting effects of lifelong learning: In harder occupations, the role of lifelong learning is primarily as a hedge against unemployment risks caused by fast-depreciating hard skills; in softer occupations, in which workers build on more value-stable skill foundations, the role of lifelong learning instead lies mostly in acting as a boost for upward career mobility and leads to wage gains.

**Freitag, 11. März 2022**

**Daniel Schunk / Eva M. Berger / Henning Hermes / Kirsten Winkel / Ernst Fehr**

*Self-regulation Training in Primary Schools Improves Academic Achievements and Long-Term Educational Career Paths*

Children's self-regulation abilities are key predictors of educational success and a wide range of other important life outcomes such as income, health and wealth. However, self-regulation is not a school subject and knowledge about how to generate lasting improvements in self-regulation and academic achievements is still limited. Here, we report the results of a randomized controlled field study that integrates a short-term self-regulation training into the normal school curriculum. We demonstrate that the training increases children's noncognitive skills in terms of overall self-regulation and impulse control as well as improves their reading abilities and their propensity to commit careless mistakes 12-13 months after treatment. Our study documents that a simple low-cost self-regulation training can be easily integrated into primary school teaching, rendering it scalable, and leads to substantial improvements in academic and self-regulation abilities that transfer to high-stake decisions about children's educational career path.

**Friedhelm Pfeiffer / Jessica Ordemann**

*The Evolution of Educational Wage Differentials for Women and Men, from 1996 to 2019*

This paper studies the evolution of three higher education wage differentials from 1996 to 2019 in Germany, a period when significant changes in the educational composition of the workforce took place. Based on regression analysis and samples of male and female workers from the Socio-Economic Panel Study, the study finds that while all three educational wage differentials increased, workers graduating from universities experienced an inverted u-shape pattern, reaching a plateau between 2011 and 2015. We argue that the decline which began after 2015, and which is detectable as well in the occupational prestige scores, may have resulted from a relative educational upskilling of the workforce as well as changes in the subject-choice composition of graduates. We also document differences between East and West Germany that appear to level off over time. The paper concludes with open questions related to these findings and potential future developments.

**Manuel Aepli / Jürg Schweri**

*Too young to choose? Students' age and choice of vocational versus general education*

An increasing literature shows that younger pupils achieve lower test scores in compulsory schooling relative to their older classmates. They are also selected into lower tracks at lower secondary school in countries with tracking. Moreover, some studies find long-term effects of school starting age on labor market outcomes, but the exact mechanisms are still unclear. In this paper, we focus on the effect of relative school starting age on the track choice between general and vocational education at upper secondary level in Switzerland. We hypothesize that lower performance and early tracking of relatively younger pupils affects their choice of vocational vs. general education, which takes typically place at age 14-15. Due to the role of gatekeepers, a direct age effect is also likely: entry into baccalaureate schools (Gymnasium) depends partly on lower secondary teachers' evaluation, and entry into apprenticeships on firms' recruitment decisions. Both teachers and firm representatives likely use age and perceived maturity as a selection criterion. The importance of age differences may increase even further, because recent institutional changes in school start cutoff dates lead to more

very young apprentices that have not yet reached age 16. In this paper, we focus on the effect of relative school starting age on the track choice between general and vocational education at upper secondary level in Switzerland. We hypothesize that lower performance and early tracking of relatively younger pupils affects their choice of vocational vs. general education, which takes typically place at age 14-15. Due to the role of gatekeepers, a direct age effect is also likely: entry into baccalaureate schools (Gymnasium) depends partly on lower secondary teachers' evaluation, and entry into apprenticeships on firms' recruitment decisions. Both teachers and firm representatives likely use age and perceived maturity as a selection criterion. The importance of age differences may increase even further, because recent institutional changes in school start cutoff dates lead to more very young apprentices that have not yet reached age 16. Our main source is longitudinal education register data on the population of pupils who left lower secondary school between 2012 to 2017. We profit from institutional cut-off dates in Swiss states (cantons), which determine the year of school entry based on children's birthdays. As we observe birthdays with daily precision for a large number of pupils, this setting allows us to compare education choices of pupils born few days before and after the cantonal cut-off date and whose age thus differs by almost one year. Such a regression discontinuity design circumvents the problem of violated monotonicity often present in the classical instrumental variables design as applied in the literature on school starting age or birth quarter effects. Preliminary results show that students that start school in a younger age are less likely to enter baccalaureate school and more likely to postpone their entry into an upper secondary education directly after compulsory schooling. One year after leaving compulsory school, these younger students are relatively more likely to serve a firm-based apprenticeship than attending baccalaureate school. We test the robustness of these findings and provide some evidence on the mechanisms causing the choice differences between vocational and general tracks.

**Mathias Huebener / Jan Marcus / Shushan Margaryan**

*Does schooling affect longevity? Evidence from death records*

We use school entry cut-off rules to study the effects of schooling on mortality. Based on the 1970 Census and the full Cause-of-Death Statistics for Germany, we exploit information on the exact date of birth within a regression discontinuity framework. Individuals born just after the school entry cut-off are older when they enter school, and they are three percentage points more likely to earn a higher secondary school leaving certificate. Yet, we find no evidence for differences in mortality for individuals born around the school entry cut-off.

## Postersession

Henning Hermes / **Philipp Lergetporer** / Fabian Mierisch / Frauke Peter / Simon Wiederhold

### *Discrimination on the Child Care Market: A Nationwide Correspondence Study*

Migrant children are underrepresented in early child care. One potential explanation for the native-migrant enrollment gap is discriminatory behavior of child care center managers that impedes access for migrant children. We investigate this possibility by sending emails from fictitious parents to > 18'000 child care centers across Germany. The email asks if there is a slot available, and how to apply. We randomly varied parents' names to signal migrant or native background. Emails from migrant parents receive 5.3 percentage points fewer answers than those from native parents. Signaling parents' education level in an additional treatment shows that the native-migrant gap in receiving an answer is not driven by child care center managers' beliefs about parents' educational background. Email-content analysis also reveals large native-migrant gaps in answer length and slot offers. Heterogeneity analyses show that discrimination is more pronounced in East Germany, but exists throughout the country. Linking detailed regional data shows larger discrimination in economically deprived regions, while the degree of discrimination does not differ by the regional share of migrants or the right-wing vote share in a constituency. Our paper provides first evidence that the socioeconomic gap in child care enrollment is partially caused by discrimination against migrant families.

Sven Resnjanskij / Jens Ruhose / Simon Wiederhold / **Ludger Wößmann**

### *Can Mentoring Alleviate Family Disadvantage in Adolescence? A Field Experiment to Improve Labor-Market Prospects*

We study a mentoring program that aims to improve the labor-market prospects of school-attending adolescents from disadvantaged families by offering them a university-student mentor. Our RCT investigates program effectiveness on three outcome dimensions that are highly predictive of adolescents' later labor-market success: math grades, patience/social skills, and labor-market orientation. For low-SES adolescents, the one-to-one mentoring increases a combined index of the outcomes by half a standard deviation after one year, with significant increases in each dimension. Part of the treatment effect is mediated by establishing mentors as attachment figures who provide guidance for the future. The mentoring is not effective for higher-SES adolescents. The results show that substituting lacking family support by other adults can help disadvantaged children at adolescent age.

**Uschi Backes-Gellner** / Fabienne Kiener / Christian Eggenberger

### *How IT progress affects the returns to specialization and social skills*

We study how information technology (IT) progress affects the returns to specialization and social skills by developing a theoretical model and empirically analyzing its implications. Our model shows how IT progress can, but does not have to, lead to increasing returns to specialization and social skills. Using rich skill data from Swiss occupational training curricula, we empirically investigate the wage returns to specialization and social skills depending on IT progress. Our individual fixed-effects analyses show that IT progress leads to increasing wage returns for specialized workers. Furthermore, our results suggest that workers with high social skills benefit from IT progress only if they are also specialized.

**Larissa Zierow** / Florian Schoner / Lukas Mergele

*Should Schools Grade Student Behavior? Quasi-Experimental Evidence from Comportment Grade Reforms*

Numerous countries require teachers to assign comportment grades rating students' social and work behavior in the classroom. However, the impact of such policies on student outcomes remains unknown. We exploit the staggered introduction of comportment grading across German federal states to estimate its causal effect on students' school-to-work transitions as well as cognitive and non-cognitive abilities. Analyzing census data, household surveys, and nationwide student assessments, we show that comportment grading does not meaningfully affect these outcomes and rule out large effect sizes. Our results are consistent with these grades being insufficiently salient for students to alter actual student behaviors.

Johannes Berens / Leandro Henao / **Kerstin Schneider**

*Tuition fees and academic (in)activity in higher education*

Only five years after introducing tuition fees, North Rhine Westphalia (NRW) issued the abolition of tuition fees in public universities in March 2011. By making use of student-level data we assess the effects on performance and observed academic activity in two universities in the state of NRW: a state university and a private university of applied sciences. First, we cluster former students of both institutions according to their level of academic activity. Second, we use this clustering to assess the impact of the reform on different levels of student inactivity. Our analyses provide evidence that the abolition of tuition fees is linked to an increase in academic inactivity among students. Eliminating tuition fees in a public university is correlated with a sizeable increase in total inactivity or ghost students. Tuition fees exemptions in a private institution increase academic inactivity through a larger share of students who reduce their effort level and become inactive.



## Technische Informationen zur virtuellen „Anreise“

Virtuelle Teilnahme über den folgenden ZOOM Link aus dem Homeoffice/Büro oder von anderen Orten Eurer/Ihrer Wahl.

### Einwahl per Zoom-App oder Browser:

<https://uni-wuppertal.zoom.us/j/94250310135?pwd=dEhwekR1ODNUNdQMWIDVjRyS2VYdz09>

Meeting-ID: 942 5031 0135

Passwort: 4t4sm7Bp

Schnelleinwahl mobil

+496971049922,,94250310135# Deutschland

+496950502596,,94250310135# Deutschland

### Plattform Wonder.me (für die persönlichen Lunch Meetings)

Wonder ist eine browserbasierte Videoplattform, die es ermöglicht, sich auf einer zweidimensionalen Ebene zu bewegen und mit anderen TeilnehmerInnen Videochats zu starten. Zum Verständnis des Grundprinzips von Wonder empfehlen wir dieses [40-sekündige Video](#).

#### Start

**Öffnen Sie das Lunch-Treffen der Ausschusstagung über diesen Link:**

**<https://app.wonder.me?spaceId=0d94e077-8276-4528-b697-18946619c7eb>**

Um sich anzumelden, nutzen Sie bitte das Passwort „**BÖA\_Poster**“.

Das Bild, das Sie von sich aufnehmen oder hochladen, wird den anderen Teilnehmenden als Avatar angezeigt. Bevor Sie den Raum betreten, werden Sie gebeten, Ihren Namen einzugeben. Dies ermöglicht es Ihnen, schnell eine/n GesprächspartnerIn zu finden.

Wonder funktioniert bisher nur verlässlich auf Computern und ist für die aktuellen Versionen der Browser Chrome und Edge optimiert, auch Firefox ist möglich. Achtung: Der Safari-Browser (Apple) unterstützt Wonder nicht.

### Gesprächskreise (Circle) und Videochats

Sie können sich durch den gedrückten Mausclick im gesamten Raum bewegen und Gesprächskreise (Circles) mit bis zu 15 Teilnehmenden starten, indem Sie sich auf einen anderen Avatar zubewegen. Wenn Sie in einem Gesprächskreis sind, startet ein Videochat. Andere Teilnehmende können Ihrem Videochat beitreten, indem Sie sich in den Kreis bewegen. Wenn Sie in einem Gespräch nicht gestört werden möchten, können Sie einen Gesprächskreis oben rechts auf „privat“ schalten.

#### Chats

Sie können entweder allen Teilnehmenden eines Gesprächskreises (Circle), einzelnen Personen (Private) oder allen Anwesenden (Everyone) Nachrichten schreiben. Wenn Sie eine neue Nachricht haben, erscheint ein gelber Kreis im Chat. Wenn Sie einen Gesprächskreis betreten, sehen Sie nur die Nachrichten, die geschrieben werden, seit Sie ihm beigetreten sind.

## **Datenschutz**

Wonder.Me ist nach eigener Aussage DSGVO-konform und weist darauf hin, dass sie von Teilnehmenden nur das Profilbild und den (anonymisierten) Namen speichern (Datenschutz FAQ hier). Sie können allen Cookies widersprechen, die nicht „notwendig“ sind, indem Sie im Pop-Up-Menü auf das x oben rechts klicken oder einen beliebigen Haken setzen, ihn wieder entfernen und auf „Save & Close“ klicken. Sollten Sie Ihre Zustimmung zu Cookies zurücknehmen wollen, können Sie das tun, indem Sie links unten auf das Keks-Symbol klicken und wie beschrieben vorgehen.