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Hans-Peter Blossfeld · Hans-Günther Roßbach  
Editors

# Education as a Lifelong Process

The German National Educational  
Panel Study (NEPS)

Second Revised Edition

 Springer VS

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## Editorial

Like other modern industrialized societies, Germany has evolved into a knowledge-based economy in which the roles of education and educational institutions have become key factors in all phases of the life course. More than ever before, education has become a lifelong process in which individuals continue to learn throughout their lives in formal, nonformal, and informal environments. As a result, their educational careers and competencies and how these unfold in relation to family, educational institutions, workplaces, and private life activities are a topic of major national interest. Although understanding what is happening over the life course requires longitudinal data, most empirical evidence in German educational research is still cross-sectional and therefore only a kind of snapshot of different individuals at particular points in their educational careers. Successive snapshots from different individuals in a series of cross-sectional surveys certainly highlight the changes in the structure as a whole. Yet, they do not show the changing (and sometimes) unchanging experiences of individuals as their educational careers progress. Panel data, with information on many individuals measured on several occasions spread over time, can be used to describe these patterns of change over the life course. They are especially able to trace the magnitude and regularity of change across groups defined by different characteristics or by exposure to different individual life-course experiences.

Thus, there is an increasing demand for high-quality longitudinal educational research in Germany. In particular, there is a clear need to work on improving the analytical and methodological tools needed to understand educational pathways through the life course and how they lead to different outcomes. The National Educational Panel Study (NEPS) for Germany has been designed to meet these challenges. It is collecting longitudinal data on educational processes and individual competence development across the entire life span from early childhood to late adulthood. Preparing the NEPS proposal was a long-term and time-consuming process extending over many years. The resulting NEPS dataset is the outcome of a close collaboration between scientists and research institutions in a network of excellence all over Germany. Members of this consortium come from major research institutions and are experts in various disciplines (psychology, educational science, sociology, economics, demography, migration studies, statistics,

survey methods, etc.). They have been collaborating in order to pool the expertise, experience, and efforts needed to deliver the best longitudinal data on educational processes in Germany. In 2007 and 2008, the first NEPS proposals were evaluated scientifically by two panels of leading international experts in the field of education organized by the *Deutsche Forschungsgemeinschaft* (German Research Foundation, DFG). Thanks to the enthusiastic recommendations of these international reviewers, the *Bundesministerium für Bildung und Forschung* (Federal Ministry of Education and Research, BMBF) decided to finance the NEPS with an exceptionally large grant. We would like to thank the BMBF for its initiative in launching the NEPS and the financial support it granted us throughout the initial years. At the beginning, the NEPS was hosted by the *Institut für bildungswissenschaftliche Längsschnittforschung* (*Institute for Longitudinal Educational Research*, INBIL) at the University of Bamberg.

In 2014, after yet another favorable evaluation, the *Leibniz-Institut für Bildungsverläufe e. V.* (Leibniz Institute for Educational Trajectories, LIfBi) was founded in Bamberg. The LIfBi took over the leading role of hosting, conducting, and disseminating NEPS. We would like to thank the German Federal Government and the German Federal States for their financial support of the LIfBi. As a member of the Leibniz Association, the LIfBi is an independent research institution set up specifically to provide a research infrastructure facility of supraregional importance and national scientific interest.

This volume begins in Chaps. 1 and 2 with a more general description of NEPS and the role of education as a lifelong process. NEPS is based on six key theoretical dimensions. The first three of these dimensions are based on the observation that individuals' educational trajectories over the life course are the result of a dynamic interplay of (1) educational decision making, (2) learning processes within different educational contexts, and (3) individual competence development. The central assumptions of NEPS are therefore that (1) decisions (by parents, students, adults, teachers, etc.) determine whether and to what extent individuals participate in specific educationally relevant social and institutional contexts; (2) these contexts promote or impede learning processes; and (3) these contexts impact on individual's competence development – and this, in turn, establishes the conditions for educational decision making in the next step of the life course. By focusing on these three key theoretical dimensions and their time-dependent interaction mechanisms, which generate change and development in education over the life course, NEPS has established a powerful foundation for theoretically grounded explanations and evidence-based research in the educational sciences. A fourth theoretical dimension has been added during the last years that is focusing on the role of motivation and personality as regulative forces across the life course.

In addition, there are many indications that the educational outcomes of migrants' children differ substantially from those of their peers from native families. These differences are likely to persist across the whole life course and follow very specific theoretical mechanisms. Therefore, a fifth theoretical dimension of NEPS is addressing the specifics of the educational careers of migrants and their descendants. It is focusing on

the two largest groups of migrants in Germany at the beginning of the 2010s: Turks and ethnic Germans from the former Soviet Union (*Spätaussiedler*).

Finally, a sixth important theoretical dimension of NEPS concerns returns to education. NEPS is focusing on not only economic but also noneconomic returns to educational qualifications such as income, job opportunities, job careers, health, reduced crime, increased political participation, family formation, fertility behavior, and homogeneity. Alongside these “objective” kinds of returns, it is also assessing individuals’ subjective well-being.

These six theoretical dimensions are also labeled “pillars” in NEPS, because they integrate the multicohort sequence design of NEPS in terms of content, theory, and methods. These theoretical dimensions or pillars are described in Chaps. 4–9.

When starting a panel study, its methodological design is a major issue. To deliver relevant information on major educational stages and the transitions between these stages as quickly as possible, NEPS is implementing a multicohort sequence design based on eight crucial educational stages in the life course: Stage 1: From Birth to Early Child Education and Care; Stage 2: From Kindergarten to Elementary School; Stage 3: From Elementary School to Lower Secondary School; Stage 4: From Lower to Upper Secondary School; Stage 5: From Upper Secondary School to Higher Education, Vocational Training, or the Labor Market; Stage 6: From Vocational Training to the Labor Market; Stage 7: From Higher Education to the Labor Market; and Stage 8: Adult Education and Lifelong Learning. Panel sweeps of the cohorts included in the NEPS are being conducted at least once a year. The surveys include competence tests and interviews with target persons and – at least for the younger cohorts – also interviews with parents and educators. These educational stages and their consequences for NEPS are discussed in detail in Chaps. 11–17.

The multicohort sequence design is following up six starting cohorts over time. The first is the “adult” cohort in which fieldwork already started in 2009. Four further cohorts (Kindergarten, 5th-grade students, 9th-grade students, college students) started in fall 2010. Fieldwork on the sixth “infant” cohort, which traces early child development, early entry into child care facilities (nursery, Kindergarten, etc.), and entrance into the school system, started in 2012. This later start was due to the extended time needed to prepare the specific instruments for this cohort (video studies, etc.).

The specific methodological problems of NEPS are addressed by a group of methodologists and statisticians. Sampling issues and methodological challenges are described in Chaps. 3. Because different instruments have to be linked across several stages, there is a special need to disentangle setting and mode effects. This is described in Chaps. 10.

The aim of the NEPS project is to deliver the best data on educational trajectories and competence development to the scientific community, and to do this as quickly as possible. Before dissemination, NEPS data is documented in a user-friendly way and subjected to strict quality controls. In addition, the project has to make sure that datasets comply with Germany’s strict personal data privacy requirements. Data from each wave are made available within 18 months of the completion of fieldwork. They are released through the Research Data Center of the LIfBi (accredited by the *Rat für Sozial- und*

*Wirtschaftsdaten*, German Data Forum, RatSWD) in three modes: (1) Scientific Use Files that can be downloaded from the NEPS website, (2) modern remote access technology (RemoteNEPS), and (3) on-site access at the LIfBi. The Research Data Center of the LIfBi provides support for users of longitudinal data. In particular, it is running regular training courses on how to use the NEPS database and conduct longitudinal analyses with NEPS data. There is also a NEPS help desk for data users. Data protection issues and the Research Data Center are described in Chaps. 18 and 19.

This volume is a revised and updated version of the Special Issue on “Education as a Lifelong Process” in the *Zeitschrift für Erziehungswissenschaft*. It informs data users on significant changes since the first edition in 2011. The updated volume does not contain any planning for NEPS activities in the coming years.

In the name of the entire NEPS consortium, we would like to take this opportunity to thank the BMBF for its marvelous support in initiating and developing the NEPS and for making such an exceptional investment in the infrastructure of the social sciences. We also thank all those partners taking part in the transition from the NEPS as a project at the University of Bamberg to an independent institute within the Leibniz Association. By name, we shall mention only the BMBF and the *Bayerisches Staatsministerium für Wissenschaft und Kunst* (Bavarian State Ministry of Science and the Arts), but we emphasize that this in no way denies the important contributions of other partners. We are also grateful for the strong support of the *Kultusministerkonferenz* (Standing Conference of the Ministers of Education and Cultural Affairs of the Federal States in Germany, KMK) and the 16 *Bundesländer* (Federal States) in gaining access to schools and institutes of higher education. We thank the members of the Scientific Board as well as the Board of Trustees of the LIfBi for their advice and expert support. We also wish to express our great appreciation to the DFG for organizing the proposal review processes in a way that ensured the highest academic standards, to the international experts and proposal reviewers for their evaluation and advice, and to the *Wissenschaftsrat* (German Council of Science and Humanities, WR) for conducting the evaluation that led to the establishment of the LIfBi. We would also like to thank the DFG for funding the Priority Programme “Education as a Lifelong Process” that allowed researchers from many different disciplines to start utilizing NEPS data immediately. Finally, we would like to thank Jutta von Maurice, who served as the third editor in the first edition. Due to time constraints, she unfortunately has not been able to work on this new revised volume. Last but not least, we would like to thank Petra Ries and Martina Alsfasser for their coordination of the revisions to the chapters in the new edition of the book, Jonathan Harrow for his rigorous proofreading and language editing of the manuscripts, and Joachim M. Seemüller for the final formatting of the typescript.

Hans-Peter Blossfeld  
(First principal investigator of the NEPS)

Hans-Günther Roßbach  
(Second principal investigator of the NEPS  
and founding director of the LIfBi)



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# Contents

<b>1</b>	<b>The National Educational Panel Study: Need, Main Features, and Research Potential</b> . . . . .	<b>1</b>
	Hans-Peter Blossfeld, Jutta von Maurice and Thorsten Schneider	
<b>2</b>	<b>Education as a Lifelong Process</b> . . . . .	<b>17</b>
	Hans-Peter Blossfeld and Jutta von Maurice	
<b>3</b>	<b>Sampling Designs of the National Educational Panel Study: Setup and Panel Development</b> . . . . .	<b>35</b>
	Christian Aßmann, Hans-Walter Steinhauer, Ariane Würbach, Sabine Zinn, Angelina Hammon, Hans Kiesl, Götz Rohwer, Susanne Rässler and Hans-Peter Blossfeld	
<b>4</b>	<b>Development of Competencies Across the Life Course</b> . . . . .	<b>57</b>
	Sabine Weinert, Cordula Artelt, Manfred Prenzel, Martin Senkbeil, Timo Ehmke, Claus H. Carstensen and Kathrin Lockl	
<b>5</b>	<b>Education Processes in Life-Course-Specific Learning Environments</b> . . . . .	<b>83</b>
	Thomas Bäumer, Eckhard Klieme, Susanne Kuger, Kai Maaz, Hans-Günther Roßbach, Ludwig Stecher and Olaf Struck	
<b>6</b>	<b>Social Inequality and Educational Decisions in the Life Course</b> . . . . .	<b>101</b>
	Volker Stocké, Hans-Peter Blossfeld, Kerstin Hoenig and Michaela Sixt	
<b>7</b>	<b>The Education of Migrants and Their Children Across the Life Course</b> . . . . .	<b>119</b>
	Cornelia Kristen, Aileen Edele, Frank Kalter, Irena Kogan, Benjamin Schulz, Petra Stanat and Gisela Will	
<b>8</b>	<b>Educational Returns Over the Life Course</b> . . . . .	<b>137</b>
	Christiane Gross, Anika Bela, Monika Jungbauer-Gans, Andreas Jobst and Johannes Schwarze	

<b>9</b>	<b>Measuring Motivational Concepts and Personality Aspects in the National Educational Panel Study</b> .....	<b>155</b>
	Florian Wohlkinger, A. Raphaela Blumenfelder, Michael Bayer, Jutta von Maurice, Hartmut Ditton and Hans-Peter Blossfeld	
<b>10</b>	<b>Disentangling Setting and Mode Effects for Online Competence Assessment</b> .....	<b>171</b>
	Ulf Kroehne, Timo Gnambs and Frank Goldhammer	
<b>11</b>	<b>From Birth to Early Child Care: The Newborn Cohort Study of the National Educational Panel Study</b> .....	<b>195</b>
	Claudia Hachul (née Schlesiger), Manja Attig, Jennifer Lorenz, Sabine Weinert, Thorsten Schneider and Hans-Günther Roßbach	
<b>12</b>	<b>Kindergarten and Elementary School: Starting Cohort 2 of the National Educational Panel Study</b> .....	<b>215</b>
	Karin Berendes, Tobias Linberg, Doreen Müller, Sebastian E. Wenz, Hans-Günther Roßbach, Thorsten Schneider and Sabine Weinert	
<b>13</b>	<b>Transition and Development from Lower Secondary to Upper Secondary School</b> .....	<b>231</b>
	Paul Fabian, Martin Goy, Stephan Jarsinski, Kerstin Naujokat, Anna Prosch, Rolf Strietholt, Inge Blatt and Wilfried Bos	
<b>14</b>	<b>Upper Secondary Education in Academic School Tracks and the Transition from School to Postsecondary Education and the Job Market</b> .....	<b>253</b>
	Wolfgang Wagner, Michaela Kropf, Jochen Kramer, Julia Schilling, Karin Berendes, Ricarda Albrecht, Nicolas Hübner, Sven Rieger, Anna Bachsleitner, Josefine Lühe, Gabriel Nagy, Oliver Lütke, Kathrin Jonkmann, Sonja Gruner, Kai Maaz and Ulrich Trautwein	
<b>15</b>	<b>Vocational Education and Training and Transitions into the Labor Market</b> .....	<b>277</b>
	Wolfgang Ludwig-Mayerhofer, Reinhard Pollak, Heike Solga, Laura Menze, Kathrin Leuze, Rosine Edelstein, Ralf Künster, Ellen Ebralidze, Gritt Fehring and Susanne Kühn	
<b>16</b>	<b>Higher Education and the Transition to Work</b> .....	<b>297</b>
	Julia-Carolin Brachem, Florian Aschinger, Gritt Fehring, Michael Grotheer, Sonja Herrmann, Marie Kühn, Uta Liebeskind, Andreas Ortenburger and Hildegard Schaeper	

---

<b>17</b>	<b>Adult Education and Lifelong Learning</b> . . . . .	<b>325</b>
	Jutta Allmendinger, Corinna Kleinert, Reinhard Pollak, Basha Vicari, Oliver Wölfel, Agnieszka Althaber, Manfred Antoni, Bernhard Christoph, Katrin Drasch, Florian Janik, Ralf Künstler, Marie-Christine Laible, Kathrin Leuze, Britta Matthes, Michael Ruland, Benjamin Schulz and Annette Trahms	
<b>18</b>	<b>Data Protection Issues in the National Educational Panel Study</b> . . . . .	<b>347</b>
	Antonia Schier, Meike Bender, Tobias Koberg, Brigitte Bogensperger, Sonja Gruner, David Schiller, Jutta von Maurice and Henriette Engelhardt-Wölfel	
<b>19</b>	<b>The Research Data Center: Making National Educational Panel Study Data Available for Research</b> . . . . .	<b>361</b>
	Daniel Fuß and Knut Wenzig	
	<b>Glossary of Institutions in the German Education System</b> . . . . .	<b>379</b>
	<b>References</b> . . . . .	<b>383</b>