

Curriculum Vitae

Nikol Elisabet Rummel

Professor of Educational Psychology (W3)
Institute of Educational Research
Faculty of Philosophy and Educational Sciences
44780 Bochum, Germany
Phone: +49 234 32 28743
Mail: Nikol.Rummel@rub.de

Female, born 11.04.1973, Kenzingen, Germany
German Nationality

Appointments

- | | | |
|---------|---------|--|
| 08/2015 | present | Professor W3 (Educational Psychology), Institute of Educational Research, Ruhr-Universität Bochum, Germany |
| 04/2010 | 07/2015 | Professor W2 (Educational Psychology), Institute of Educational Research, Ruhr-Universität Bochum, Germany |
| 03/2008 | present | Adjunct Professor, Human Computer Interaction Institute, Carnegie Mellon University, Pittsburgh, USA |

Offered Positions

- | | |
|---------|--|
| 07/2014 | Offer for W3 Professorship (Educational Psychology), Institute of Educational Research, Ruhr-Universität Bochum, Germany → accepted 7/2014; start date 8/2014 |
| 07/2014 | Offer for W3 Professorship (Psychology of Teaching and Learning), Faculty of Education, Universität Hamburg, Germany |
| 04/2014 | Offer for W3 Professorship (Developmental and Educational Psychology), Faculty of Psychology, University of Koblenz - Landau, Germany |
| 06/2009 | Offer for W2 Professorship (Educational Psychology), Institute of Educational Research, Ruhr-Universität Bochum, Germany → accepted 10/2009; start date 4/2010 |
| 06/2009 | Offer for W3 Professorship (Educational Technologie and Knowledge Management), Saarland University, Germany |

Academic Degrees

- | | |
|---------|---|
| 02/2010 | Habilitation (with <i>venia legendi</i> for Psychology), Institute of Psychology, University of Freiburg, Germany |
| 05/2004 | Doctorate in Psychology (<i>Summa Cum Laude</i>), Institute of Psychology, University of Freiburg, Germany
Dissertation: "Improving Computer-Mediated Collaboration: Development and Empirical Evaluation of Two Instructional Support Methods"
Advisor: Prof. Dr. Hans Spada |
| 09/2002 | Diploma in Psychology (1.0, with distinction), Institute of Psychology, University of Freiburg, Germany |
| 08/2000 | M.S. in Educational Psychology – Cognitive Science Applied to Education, Department of Educational Psychology, University of Wisconsin, Madison
Advisors: Professor Joel R. Levin, Professor Sharon J. Derry |

Academic Education and Career

10/2004	03/2010	Senior research scientist (C1), Institute of Psychology, University of Freiburg, Germany (at chair of Prof. Dr. Hans Spada)
10/2005	03/2006	Visiting research faculty, Human Computer Interaction Institute, Carnegie Mellon University, Pittsburgh, USA
07/2001	06/2004	Participation in the German-American Exchange Program on “Technologies in Education”, co-funded by the DFG [German Research Foundation] and NSF (National Science Foundation): Workshops held at the Knowledge Media Research Center in Tübingen (November 2001 and 2003), at the University of South Florida in Tampa (May 2002), and at the Stanford Center for Innovations in Learning, Stanford University (June 2004) Research stays at the University of California Santa Barbara, Stanford University, Carnegie Mellon University, Penn State University (all 2004)
09/2000	09/2004	Research Scientist (BAT 2a), University of Freiburg, Germany, in the project “Computer-Mediated Collaboration on the Basis of Complementary Expertise: Analysis and Support” (PIs: Prof. Dr. Hans Spada, Prof. Dr. Franz Caspar), funded by the DFG [German Research Foundation] in the Special Priority Program (SPP1081) „Net-Based Knowledge Communication in Groups”
05/2000	08/2000	Completing Master’s programme at the Department of Educational Psychology, University of Wisconsin-Madison, USA
10/1999	05/2000	Student Research Assistant with Professor Hans Spada in the Research Group on Cognitive Systems, Institute of Psychology, University of Freiburg, Germany
08/1999	09/1999	Internship at the Max-Planck-Institute for Human Development with Professor Elsbeth Stern in the ENTERPRISE project (Enhancing Knowledge Transfer and Efficient Reasoning by Practicing Representation in Science Education)
08/1998	07/1999	Student in the Master’s program at the Department of Educational Psychology, University of Wisconsin-Madison, USA (<i>Fulbright Scholarship</i>)
10/1995	09/2002	Student of Psychology, Institute of Psychology, University of Freiburg, Germany (interrupted for stay in the USA: 08/1998 – 07/1999 and 05/2000 – 08/2000)
10/1993	07/1995	Teacher training in German, English as a second language, and Fine Arts for Realschule [secondary school] at the Pädagogische Hochschule [college of education], Freiburg

Scholarships

- 04/2006 12/2008 Elite Program for Postdocs of the Baden-Württemberg Stiftung
- 11/2000 10/2003 Scholarship of the Virtual PhD Program (VGK) “Knowledge Acquisition and Knowledge Exchange with New Media”, funded by the DFG [German Research Foundation]
- 08/1998 07/1999 Fulbright scholarship to attend the Master’s Program at the Department of Educational Psychology, University of Wisconsin Madison, USA.

Awards

- 05/2015 Best Interactive Event Award at the 17th International Conference on Artificial Intelligence in Education (AIED) in Madrid, Spain
- 10/2004 Eugen-Fink-Preis [outstanding dissertation award] of the Faculty of Economics and Behavioral Sciences at the University of Freiburg
- 05/2001 Nachwuchswissenschaftlerpreis [junior scientist award] of the SIG Educational Psychology of the Deutsche Gesellschaft für Psychologie (DGPs) [German Psychological Association] for Master’s Thesis

Invited Talks and Keynotes

- 04/2017 Plenary keynote at the 9th International Conference on Computer Supported Education (CSEDU 2017), Oporto, Portugal
- 11/2016 Plenary keynote at the International Conference of Computers in Education, Indian Institute of Technology (IIT) Bombay, Mumbai, India
- 09/2016 Invited presentation at the Workshop Learning Analytics at the DeLFI Conference (Annual Conference of the SIG E-Learning of the German Informatics Society)
- 04/2014 Invited talk at the Learning Sciences Lab at the National Institute of Education at Nanyang Technological University, Singapore
- 02/2010 Invited talk at the National Institute of Education at Nanyang Technological University, Singapore
- 11/2009 Plenary keynote at the “Alpine Rendezvous” Conference of the EU Network of Excellence (NoE) STELLAR, Garmisch-Patenkirchen, Germany
- 03/2004 Invited talk Pennsylvania State University, USA
- 03/2004 Invited talk Human Computer Interaction Institute, Carnegie Mellon University, Pittsburgh, USA

Membership in Professional Organizations

- since 2006 European Association for Research on Learning and Instruction (EARLI)
SIG 7: Learning and Instruction with Computers
SIG 6: Instructional Design
- since 2004 International Society of the Learning Sciences (ISLS)
- since 2004 Deutsche Gesellschaft für Psychologie (DGPs) [German Psychological Association]
SIG Educational Psychology
SIG Media Psychology

Contributions to the Scientific Community

Editorial work and reviewing

- Associate Editor: International Journal of Computer-Supported Collaborative Learning (IJCSCL)
- Associate Editor: Journal of the Learning Sciences (JLS, 2010-2016)
- Editorial board member: International Journal of Artificial Intelligence in Education (IJAIED), International Journal of Computer-Supported Collaborative Learning (IJCSCL), Learning and Instruction (JLI)
- Ad-hoc reviewer for further journals: Cognition and Instruction, Computers and Education, Computers in Human Behavior, Educational Psychology Review, Instructional Science, Journal of Educational Psychology, Transactions on Learning Technologies
- Ad-hoc reviewer for conferences: Annual Conference of the American Educational Research Association (AERA), Conference of the European Association for Research on Learning and Instruction (EARLI), European Conference on Technology Enhanced Learning (EC-TEL), International Conference on Computer Support for Collaborative Learning (CSCL), International Conference of the Learning Sciences (ICLS)
- Reviewer for funding organizations: Deutsche Forschungsgemeinschaft (DFG); Leibniz-Gemeinschaft; Schweizer Nationalfond (SNF); National Science Foundation, USA (NSF); Netherlands Organisation for Scientific Research (NWO); Netherlands Organisation for Health Research and Development (ZonMw)

Selected service in scientific advisory boards

- Chairwomen of the scientific advisory board of the Leibniz-WissenschaftsCampus "Kognitive Schnittstellen", Tübingen, since 4/2017
- Advisory Board member Teilprojekt "Toolbox Lehrerbildung" der Qualitätsoffensive Lehrerbildung at the Technical University München, since 10/2016
- Advisory Board member project "Improving collaborative learning in engineering classes through integrated tools for instructors and students", NSF Cyberlearning and Future Learning Technologies program (Prof. Emma Mercier, College of Education, University of Illinois, Urbana-Champaign), since 09/2016
- Advisory Board member project "Continuous Learning and Assessment of Students in Science" (CLASS), NSF Discovery Research K-12 program (Prof. Marcia Linn, Graduate School of Education, University of California, Berkeley), 2011-2016

Selected activities in scientific organizations

- President of the International Society of the Learning Sciences (ISLS, since 07/2016)
- Member of the Board of Directors of the International Society of the Learning Sciences (ISLS, since 06/2013)
- Chair of SIG 6 (Instructional Design) of the European Association for Research on Learning and Instruction (EARLI, 8/2011-8/2015)
- Chair of the CSCL Committee of the International Society of the Learning Sciences (ISLS, 09/2010-06/2015)

Selected activities in the organization of conferences and workshops

- Program committee co-chair European Association for Research on Learning and Instruction SIG 6/7 meeting 2014, Erasmus University Rotterdam, NL
- Program committee co-chair International Conference on Computer Supported Collaborative Learning (CSCL) 2013, University of Wisconsin – Madison, USA

- Program committee member: International Conference on Computer Supported Collaborative Learning (CSCL) 2011, University of Hongkong; International Conference on Computers in Education (ICCE) 2012, Singapore, and 2013, Bali, Indonesia
- Workshop Committee Co-chair: International Conference of the Learning Sciences (ICLS) 2012, University of Sydney, Australia; European Conference on Technology Enhanced Learning (EC-TEL) 2009; International Conference of the Learning Sciences (ICLS) 2008, Utrecht, NL
- Mentoring: Mentor for the Doctoral Workshop of the SIG Media Psychology of the DGPs, TU Dresden (September 2007); Mentor for Doctoral Workshop at the Alpine Rendezvous of the EU Network of Excellence STELLAR (Dec 2009); Mentor for the Early Career Workshops at CSCL Conference 2007, ICLS Conference 2014, ICLS Conference 2016 (chair)

Academic Service and Administrative Responsibilities

Search Committees

2016/17	Head of search committee for W2 professorship "Life Long Learning in Nonformal and Informal Settings"
2015/16	Head of tenure track evaluation committee for Jun.-Prof. Dr. Grit im Brahm ("Empirical Educational Research and Instructional Design")
2015/16	Member of search committee for W3 professorship "Competence Development and Competence Modeling"
2015/16	Member of search committee for W2 professorship "Social Spaces and Places/Environments of Non-formal and Informal Learning"
2015	Member of search committee for W2 professorship "Diagnostics and Design of Individual Support in Schools"
2013	Member of search committee for W3 professorship "Theories of Education and Educational Sciences"
2013	Member of tenure track evaluation committee for Jun.-Prof. Tobias Schlicht "Philosophy of Cognition and the Conscious"
2012	Member of tenure track evaluation committee for Jun.-Prof. Dr. Grit im Brahm ("Empirical Educational Research and Instructional Design")
2010	Member of search committee for W2 professorship ("Theory of Instruction and Instructional Design")

Other

since	10/2012	Module representative and coordinator for the module Empirical Research in the Teaching Profession at the Institute of Educational Research at the Ruhr-Universität Bochum.
since	10/2010	Involvement in developing the Center for Educational Studies of the Professional School of Education at the Ruhr-Universität Bochum
since	10/2010	Involvement in the redesign of the Master degree program Educational Science at the Ruhr-Universität Bochum
since	04/2010	Module representative and coordinator for the module A2 Learning and Development in the Bachelor degree program Educational Science

05/2010	03/2012	Involvement in the Ruhr-Universität Bochum's plans for the Excellence Initiative and participation in presenting the concept within the assessment process.
06/2010	07/2011	Involvement in adapting the educational science accompanying degree within the Master of Education program (=teacher training degree) to the new Federal teacher training act in NRW
10/2010	10/2012	Involvement in the re-accreditation of the Master and Bachelor degree program Educational Science
07/2006	04/2009	Elected representative of non-professorial teaching staff (Mittelbau) on the faculty board of the Faculty of Economics and Behavioral Sciences (University of Freiburg)
04/2006	04/2008	Non-professorial teaching staff (Mittelbau) spokesperson for the Institute of Psychology (University of Freiburg)
02/2005	10/2006	Academic advisor for psychology majors and minors (University of Freiburg)

Advising of Doctoral Students and Postdoctoral Mentoring

Current doctoral students (sorted by start date)

Advisor: Sebastian Strauss, Institut für Erziehungswissenschaft, Ruhr-Universität Bochum, since fall 2016

Advisor: Christian Hartmann, Institut für Erziehungswissenschaft, Ruhr-Universität Bochum, since fall 2015

Advisor: Valentina Nachtigall, Institut für Erziehungswissenschaft, Ruhr-Universität Bochum, since fall 2015

Advisor: Julia Erdmann, Institut für Erziehungswissenschaft, Ruhr-Universität Bochum, since fall 2014

International Ph.D. committee member (TAC member): Kom Mun Siong¹, National Institute of Education, Singapore, since summer 2013

Advisor: Claudia Mazziotti, Institut für Erziehungswissenschaft, Ruhr-Universität Bochum, since fall 2012

Co-Advisor: Jennifer Olsen², Human-Computer Interaction Institute (HCII), CMU, since fall 2012

Completed doctoral degrees (sorted by date of completion)

Advisor: Dr. Alexandra Funk, Institut für Erziehungswissenschaft, Ruhr-Universität Bochum, spring 2012 – spring 2016

Co-Advisor: Dr. Michael Wiedmann³, Promotionskolleg Pro|Mat|Nat (Pädagogische Professionalität in Mathematik und Naturwissenschaften), University of Freiburg, Germany; fall 2011 – spring 2015. Currently: Senior Projectmanager, Robert-Bosch Stiftung

¹ Advisor: Prof. Kapur, ETH Zürich, Switzerland

² Advisor: Prof. Alevan, Human Computer Interaction Institute, CMU, Pittsburgh, USA

Co-Advisor: Dr. Christine Plesch³, Institute of Psychology, University of Freiburg, Germany; fall 2010 - spring 2015. Currently: School psychologist, Land Baden-Württemberg

Co-Advisor: Dr. Celia Kändler³, Promotionskolleg Pro|Mat|Nat (Pädagogische Professionalität in Mathematik und Naturwissenschaften), University of Freiburg, Germany; fall 2011 – winter 2014; Currently: School psychologist, Land Baden-Württemberg

Advisor: Dr. Katharina Loibl (nee Westermann), Institut für Erziehungswissenschaft, Ruhr-Universität Bochum; spring 2010 – winter 2013; Currently: Postdoctoral reseacher, PH-Freiburg

Co-Advisor: Dr. Martina Rau¹, Human-Computer Interaction Institute (HCII), CMU; fall 2008 - spring 2013. Currently: Assistant Professor, University of Wisconsin - Madison, USA

Co-Advisor: Dr. Dejana Mullins (nee Diziol)³, Institute of Psychology, University of Freiburg, Germany; fall 2006 - spring 2011. Currently: Deloitte Consulting GmbH, Hamburg, Germany

Co-Advisor: Dr. Erin Walker⁴, Human-Computer Interaction Institute (HCII), CMU; fall 2004 - summer 2010. Currently: Assistant Professor, Arizona State University, Phoenix, Arizona, USA

Postdoctoral fellows (sorted by start date)

Dr. Anouschka van Leeuwen, since fall 2016

Dr. Julia Eberle, since spring 2015

Dr. Malte Elson, since spring 2015

Dr. Michael Wiedmann, 2015-2016

Dr. Astrid Wichmann, 2010-2016

³ Advisor: Prof. Spada, Institut für Psychologie, Universität Freiburg

⁴ Advisor: Prof. Koedinger, Human Computer Interaction Institute, CMU, Pittsburgh, USA

Research Grants: Third Party Funding (sorted by end date)

- 03/2017 02/2020 Project „Intelligente Unterstützung für Kleingruppenarbeit in der online-gestützten Hochschullehre – IKARion“
[Intelligent support for small group collaboration in online settings in higher education]
Funded by: Bundesministerium für Bildung und Forschung [Federal Ministry of Education and Research]
Role: Co-PI
Co-PIs: Prof. Dr. Monique Janneck (Fachhochschule Lübeck), Prof. Nicole Krämer, Prof. Ulrich Hoppe (Universität Duisburg-Essen)
- 07/2016 12/2020 NRW Fortschrittskolleg „Schöne neue Welt: Sicherheit für Menschen im Cyperspace“
[Brave new world: Security for humans in cyberspace]
Funded by: Ministerium für Innovation, Wissenschaft und Forschung des Landes Nordrhein-Westfalen [Ministry of Innovation, Higher Education and Research of North Rhine-Westphalia]
Role: Co-PI
Co-PIs:
- 09/2012 08/2017 Project “Combining advantages of collaborative and individual learning with an intelligent tutoring system for fractions.”
Funded by: Institute of Educational Sciences (IES)
Role: Co-PI
Co-PI: Prof. Vincent Aleven (CMU, Pittsburgh)
- 11/2014 12/2016 Project „Pädagogische und technologische Konzepte für kooperatives Lernen in Massive Open Online Courses (MOOCs)“ [Pedagogical and technological approaches towards incorporating collaborative learning in MOOCs]
Funded by Mercator Research Center Ruhr
Role: PI
Co-PIs: Prof. Nicole Krämer (Universität Duisburg-Essen), Prof. Thomas Herrmann (RUB), Prof. Ulrich Hoppe (Universität Duisburg-Essen), Dr. Astrid Wichmann (RUB)
- 11/2012 10/2015 STREP “Talk, Tutor, Explore, Learn: Intelligent Tutoring and Exploration for Robust Learning” (Acronym: iTalk2Learn)
Funded by: EU im Rahmen von FP7-ICT-2011-8
Role: Co-PI
Cooperation partners and Co-PIs: Prof. Lars Schmidt-Thieme (Stiftung Universität Hildesheim); Dr. Manolis Mavrikis (Institute of Education, University of London); Dr. Sergio Gutierrez Santos (Birkbeck College, University of London); Sail Labs Technology AG; Testaluna SRL; Whizz Education Limited

- 01/2012 12/2015 Project "Promoting Learning in Online Peer Assessment Settings by Scripting Negotiation and Supporting Knowledge Awareness"
 Funded by: German Israeli Foundation for Scientific Research and Development (GIF)
 Role: PI
 Co-PI: Prof. Michaela Ronen (Holon Institute of Technology, Israel)
 Cooperation partner: Prof. Armin Weinberger (Universität des Saarlandes)
- 06/2010 10/2011 Themeteam "Multiple Perspectives on Multiple Representations" (MUPEMURE)
 Funded by: EU Network of Excellence (NoE) STELLAR
 Role: Co-PI
 Co-PIs: Prof. Armin Weinberger (Universität des Saarlandes); Prof. Daniel Bodemer (Universität Duisburg Essen); Prof. Manu Kapur (National Institute of Education, Singapore); Prof. Gaelle Molinari (Fondation Formation Universitaire à Distance, Suisse)
- 09/2009 08/2012 Project "Learning with Multiple Graphical Representations in a Complex, Real-world domain: Intelligent Software Tutors for Fractions"
 Funded by: NSF REESE-Programm (Research and Evaluation on Education in Science and Engineering)
 Role: Co-PI
 Co-PI: Prof. Vincent Aleven (CMU, Pittsburgh)
- 02/2009 05/2012 Network of Excellence (NoE) "Sustaining Technology Enhanced Learning Large-scale Multidisciplinary Research (STELLAR)"
 Funded by: EU im Rahmen von FP7-ICT-2007-3
 Role: Part of University of Freiburg team for NoE submission together with: Prof. Hans Spada (Universität Freiburg), Dr. Anne Deiglmayr (ETH Zürich)
- 06/2008 09/2009 Project "Sequencing learning with multiple representations of rational numbers"
 Funded by: Pittsburgh Science of Learning Center (NSF)
 Role: Co-PI
 Co-PI: Prof. Vincent Aleven (CMU, Pittsburgh)
- 01/2008 12/2009 Project "Collaborative Extensions to the Cognitive Tutor Algebra: Adaptive Assistance for Peer Tutoring"
 Funded by: Pittsburgh Science of Learning Center (NSF)
 Role: PI
 Co-PI: Prof. Ken Koedinger (CMU, Pittsburgh)

- 01/2008 04/2010 DFG-Network “Assessing and Augmenting Instructional Communication in Computer-Supported Settings”
Funded by: DFG
Role: PI
Co-PI: Prof. Nicole Krämer (Universität Duisburg-Essen)
- 04/2006 12/2008 Project “Improving Algebra Learning and Collaboration through Collaborative Extensions to the Algebra Cognitive Tutor – *Testing a Collaborative Problem-Solving Script*”
Funded by: Baden-Württemberg Stiftung
Role: PI
- 01/2006 06/2008 Project “Supporting Conceptual Learning in Chemistry through Collaboration Scripts and Adaptive, Online Support”
Funded by: Pittsburgh Science of Learning Center (NSF)
Role: PI
Co-PI: Dr. Bruce McLaren (DFKI, Saarbrücken und CMU, Pittsburgh)
Cooperation partners: Prof. i. K. Dr. Andreas Harrer (Katholische Universität Eichstätt); Prof. Niels Pinkwart (TU Clausthal); Prof. Dave Yaron (CMU, Pittsburgh)
- 01/2006 12/2007 European Research Team “Computer-based Analysis and Visualization of Collaborative Learning Activities (CAViCoLA)”
Funded by: EU im Network of Excellence “Kaleidoscope: Concepts and Methods for Exploring the Future of Learning with Digital Technologies”
Role: Co-PI
Co-Pis: Prof. Hans Spada (Universität Freiburg); Prof. Nikolaos Avouris (Universität Patras, Griechenland); Prof. i. K. Andreas Harrer (Katholische Universität Eichstätt-Ingolstadt); Prof. Yannis Dimitriadis (Universität Valladolid, Spanien)
- 01/2005 12/2007 Project “Improving Algebra Learning and Collaboration through Collaborative Extensions to the Algebra Cognitive Tutor”
Funded by: Pittsburgh Science of Learning Center (NSF)
Role: PI
Co-PIs: Dr. Bruce McLaren (DFKI, Saarbrücken und CMU, Pittsburgh); Prof. Hans Spada (Universität Freiburg)

Research Grants: University Programs (sorted by end date)

- 02/2016 07/2017 Project „Konzeption und Erprobung eines Online-Forschungslogbuchs als Unterstützungsmaßnahme beim Erwerb sozial- und geisteswissenschaftlicher Forschungskompetenzen“
[Conceptualization and testing of an online research logbook to support the acquisition of research competences among social sciences and humanities students]
Funded by: Förderprogramme RUB "Forschendes Lernen"
Role: Co-PI
Co-PIs: Dr. Julia Eberle (RUB), Tim Schönfeld (RUB)
- 10/2015 12/2016 Project „Vicarious Failure – Possibilities for Example-Based Learning in Problem-Solving Prior to Instruction“
Funded by: Center of Educational Studies, Professional School of Education, Ruhr-Universität Bochum
Role: PI
- 02/2015 09/2015 Project „Konzeption eines Blended Learning Formats für vorlesungsbegleitende Übungen“ [Development of a blended learning concept for practical courses accompanying lectures]
Funded by: Förderprogramme RUB "5x5000"
Role: PI
Co-PI: Dr. Astrid Wichmann (RUB)
- 04/2014 04/2015 Project „Unterstützung des wissenschaftlichen Arbeitens mithilfe von Online-Peer-Feedback durch das Schaffen von Freiräumen zum eigen- und sozialverantwortlichen Lernen“ [Supporting the development of academic skills by means of online peer feedback]
Funded by: Förderprogramme RUB "Forschendes Lernen"
Role: Co-PI
Co-PIs: Dr. Astrid Wichmann (RUB), Tim Schönfeld (RUB)
- 09/2011 08/2012 Project "Lernen im Fach Mathematik durch kooperatives Problemlösen ohne vorangehende Instruktion"
Funded by: Center of Educational Studies, Professional School of Education, Ruhr-Universität Bochum
Role: PI