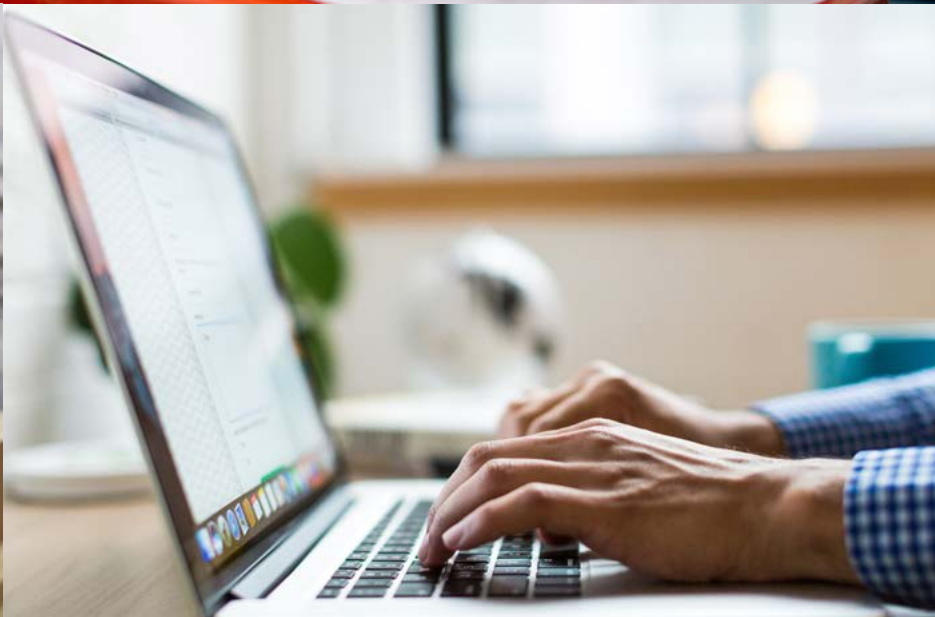
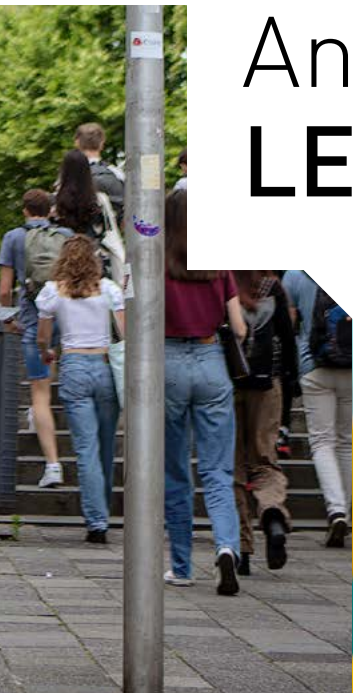
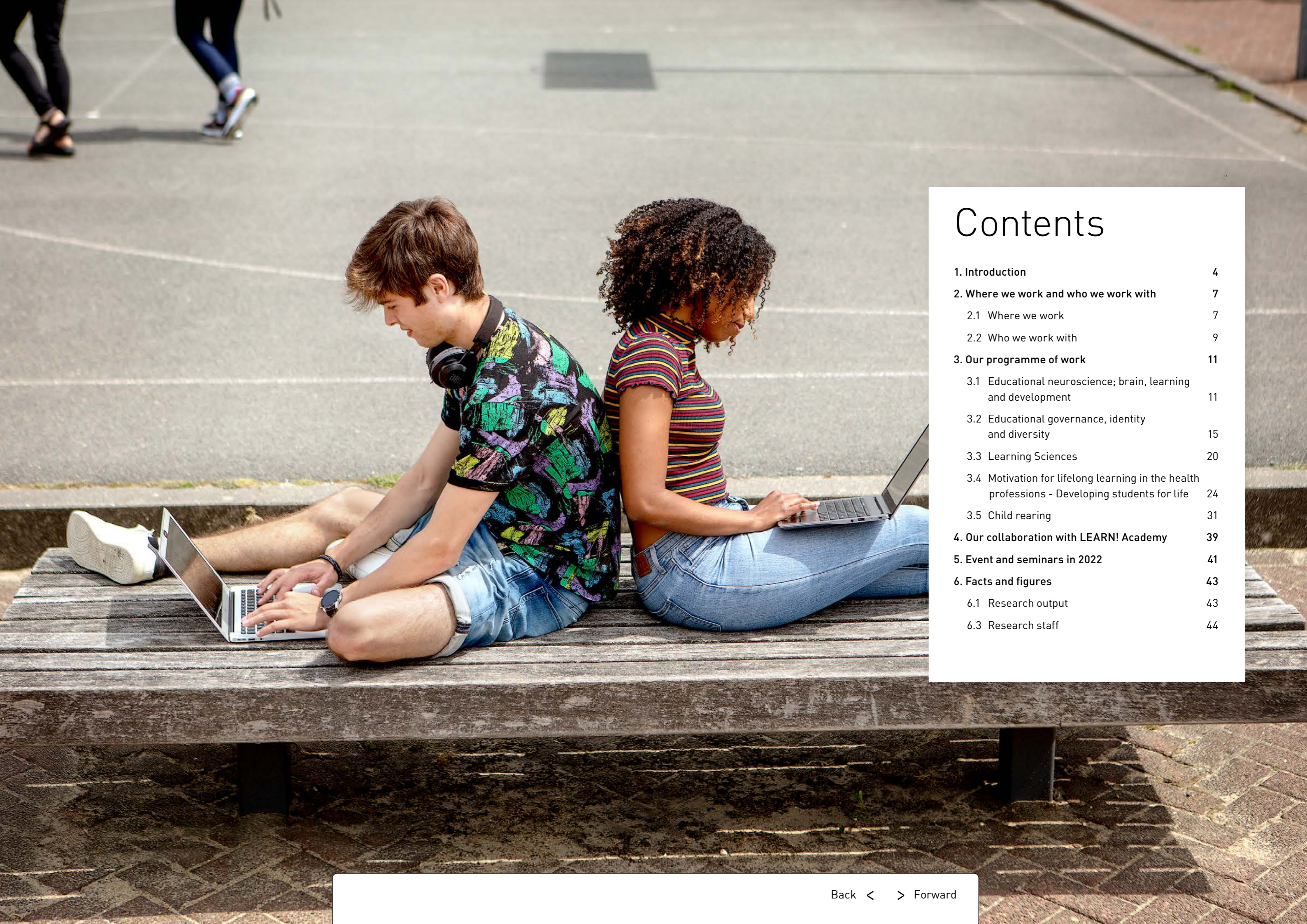


Annual Report **LEARN!** 2022





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1. Introduction

It is my pleasure to present our annual report over 2022. In 2022 we were pleased to be able to organize many events on campus again and our staff were also able to travel and meet international colleagues. Equally, we were able to host international guests for short stays and have the lively discussions and conversations that come with being in the same room over lunch or at the coffee machine.

As we are a network organisation, the added value of the institute lies in bringing colleagues together to work on interdisciplinary themes, to share knowledge and networks and learn from one another. We have continued to invest in our internal and external communication to meet our strategic aim of becoming the leading research institute and go-to point locally, nationally, and internationally for research on learning and development as well as the institutional and societal context in which people learn and develop. Our various communication channels are a testimony to how we engage with LEARN! members and external stakeholders, but more importantly we actively collaborate with practitioners and policymakers in our research.

As ever you can find us on:
YouTube channel: https://www.youtube.com/channel/UCXCEujjHwH5Q5y_epSZaHeg
Online magazine: <https://learnvu.magzmaker.com/>
Linkedin: <https://www.linkedin.com/company/vuresearchinstitutelearn>
Website: vu.nl/learn

The Institute is dedicated to support and ensure high quality and integrity of work across its five research programmes: child rearing, educational neuroscience, learning sciences, motivation for lifelong learning, and educational governance. In this annual report, each of these programmes provides an overview of some of their research highlights from 2022 as well as ways in which they have ensured the societal relevance of our work.




LEARN! is an interdisciplinary research institute of the Vrije Universiteit Amsterdam with membership from colleagues of the Faculty of Behavioural and Movement Sciences that hosts the institute and of the medical school of the Amsterdam University Medical Centre. LEARN! colleagues have a background in the behavioural, social, medical, philosophical, and educational sciences. They bring various perspectives to better understand learning in an institutional and societal context. LEARN! is an interdisciplinary research institute on learning in an institutional and societal context.

In 2022, we launched a methodology helpdesk for members to receive and provide support in specific research methodologies, including how to access and analyze big quantitative datasets. But also how to analyse qualitative data or observe parent-child interactions. Given the vast amount of possibilities of qualitative and quantitative research in our domain, bringing our shared expertise together in an accessible helpdesk will be of great benefit in ensuring our research excellence.

2022 was an important year for the institute as we were assessed by an external panel. A group of national and international colleagues visited the institute in November to meet with colleagues and scrutinize our work against the standards in the Dutch 'Strategy Evaluation Protocol. When writing this annual report, the

panel finalized its report with a highly positive assessment on all standards: research quality, viability and societal relevance. We look forward to continuing our work in 2023 when a new strategy will be developed to see us through the next five years. I hope you enjoy reading about our accomplishments over 2022.

*Professor Dr. Melanie Ehren
Director of LEARN!*

 We study learning and development and the context in which people learn and develop.

Melanie Ehren





2. Where we work and who we work with

Where we work and who we work with

2.1 Where we work

One of our strategic aims is to enhance our international standing and collaboration, such as through joint work on research or exchange visits. One of the metrics that provides an indication of the countries we work in are the countries of origin of the co-authors our staff publish with. The list below includes

an overview of co-authors' countries that are represented on more than 3% of our publications. We have published work with colleagues across a total of 36 countries, particularly from the UK and the USA. The organizational affiliations of the colleagues in these two countries are included in table 1.

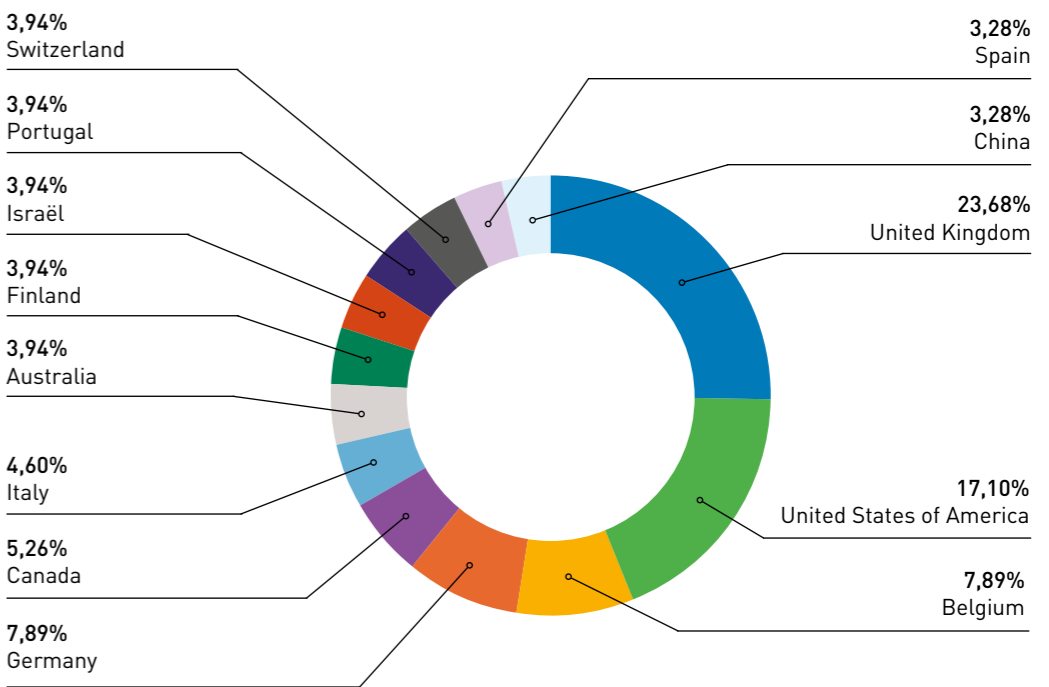


Table 1. Organizational affiliations of co-authors from the UK and the US

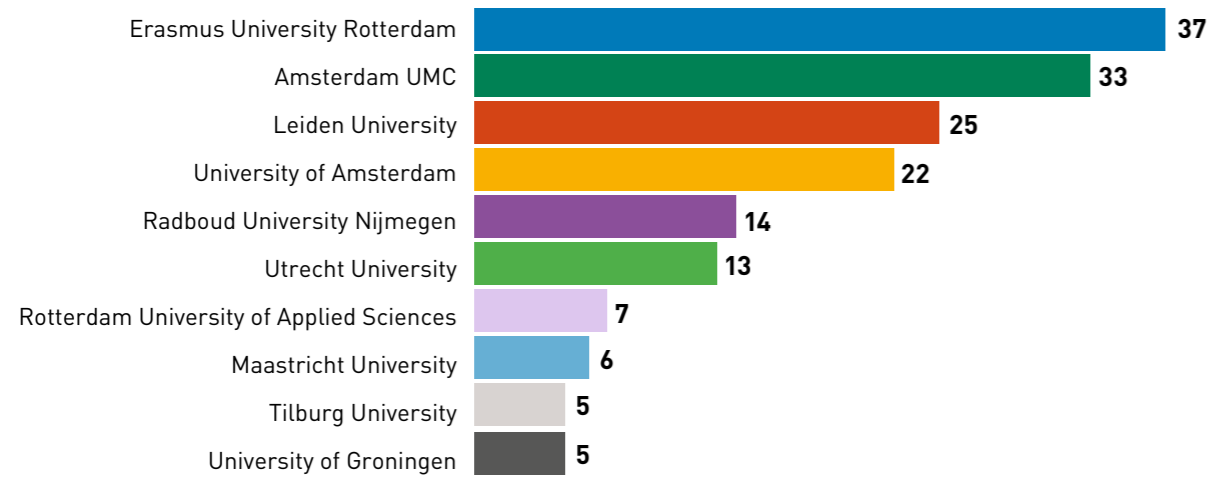
Collaboration with UK partners		Collaboration with USA partners	
University College of London	23	Harvard University	7
King's Colleges London	9	SUNY Polytechnic Institute	4
University of Cambridge	9	University of California Berkeley	4
Birbeck University London	2	University of Delaware	4
Cardiff University	2	University of Minnesota Twin Cities	4
City, University of London	2	University of Maryland, College Park	3
King Edward Memorial Hospital for Women	2	Pennsylvania State University	2
University of Exeter	2	Purdue University	2
University of Glasgow	2	Saint Joseph University	2
Northumbria University	2	Stony Brook University	2
		Tulane University	2
		University of California at Davis	2
		University of California at Los Angeles	2
		University of Missouri	2
		University of Pennsylvania	2
		University of Utah	2
		Yale University	2

2.2 Who we work with

Equally important is our work with colleagues from the Netherlands. Table 2 provides an overview of the universities and polytechnics in the Netherlands that our staff co-publish with. We continue to have strong partnerships in

publications with the University of Amsterdam, Erasmus University in Rotterdam, University of Utrecht, Tilburg University, and Leiden University.

Table 2. List of institutions for co-authorship (only institutions with >3 outputs)



Where we work and who we work with



3. Our programme of work

Our work is organized in five programmes, each of which contribute to questions about 'learning and development and the context in which people learn and develop'. In this chapter we present an overview of staff working in each programme in 2022, research highlights and examples of outreach activities.

3.1 Educational Neuroscience; brain, learning and development

Educational Neuroscience: brain, learning and development is led by Prof. dr. Nienke van Atteveldt. It includes a distinct body of work on the social-emotional, motivational, meta-cognitive, and environmental aspects of learning. These aspects are considered relevant to better understanding what is needed for children to do well and feel well in school. In addition to understanding learning from the individual (child) level, the programme

also looks at how individual development is influenced by the environment, such as the peer context in the classroom, and how the environment influences genetic aspects of development and learning.

Questions that underpin this work link to developmental and biological perspectives that can help to better understand learning and behaviour of children and adolescents in educational contexts. The group uses ecologically valid research approaches to explore these questions, which means that lab work is combined with studies in naturalistic learning situations. An example is the use of portable neuro-imaging techniques instead of using more traditional neuroimaging done in highly controlled laboratory settings. These tools allow for a better understanding how the child's brain works in real-life settings; further technical development of such portable devices will allow us to study a range of settings and ensure our findings have immediate relevance for educators.



Nienke van Atteveldt

3.1.1 Staff

Professor dr. Nienke van Atteveldt
(program leader)

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Professor dr. Lydia Krabbendam
lydia.krabbendam@vu.nl

Dr. Elsje van Bergen (associate professor)
Dr. Barbara Braams (associate professor)
Dr. Mariëtte Huizinga (associate professor)
Dr. Marieke Buil (assistant professor)
Dr. Mariët van Buuren (assistant professor)
Dr. Tieme Janssen (assistant professor)
Dr. Nikki Lee (assistant professor)
Dr. Jeroen Pronk (assistant professor)
Dr. Jellie Sierksma (assistant professor)
Dr. Tuongvan Vu (assistant professor)
Dr. Marieke van Rest (research associate)
Dr. Hester Sijtsma (research associate)
Bella van Erp, MSc (lecturer)
Tessa van der Kamp, MSc (lecturer)
Alma Roos, MSc (visiting fellow)

PhD students:

- Sibel Altikulac, start date May 2017, Effort and reward processing in Adolescents
- Smiddy Nieuwenhuis, start date May 2017, Growth mindset: neural, physiological and behavioural correlates
- Ilona Benneker, start date Sept 2018, The role of peers and parents on ability beliefs of early and late adolescents
- Laura Fornari, start date Sept 2022, The effect of group-based biases on collaboration and inter-brain synchrony
- Nil Horoz, start date November 2018, Socioeconomic inequality in child development and school performance
- Christel Klootwijk, start date October 2021, Everyday Kindness: The Development of Subtle Prosocial Behaviour During Childhood
- Perline Demange, started on the 08/08/2018, Genetic as a research tool: a natural experiment to elucidate the causal effect of social mobility on health
- Sofieke Kevenaer, start date: 01-09-2018, Genetically informed analysis of individual differences in children .

3.1.2 Research highlights

Table 3. Research highlights Educational Neuroscience: brain, learning and development

Project	PI, team and funder	Key questions and findings
SENSA Ammodo Science Award	Lydia Krabbendam, Nienke van Atteveldt & Paul van Lange	Key questions: How does brain-to-brain synchrony develop between children who are working together, in relation to their background characteristics and social network position? How does the dynamic social context impact on decision- making in children and adolescents? How can we incorporate contemporary challenges, such as social decision approaches to climate change, into our developmental research? How can we extend our research on the impact of implicit beliefs to address these contemporary challenges?
Stichting-tot-steun-VCVGZ	Dr. Mariët van Buuren Prof. dr. Lydia Krabbendam	The aims of this project are: To investigate how personal and self-stigma affect peer relationships of adolescents with subclinical psychopathology. To investigate whether self-stigma contributes to a devaluation of self-concept. To investigate the association between self-stigma and social interactions in the context of daily life. Data collection is ongoing.
Wellcome Trust ALIVE	PI Lund, Jordans, team: Krabbendam, Kohrt, Avendano, Luitel, Dua	The aim of this study is to develop and pilot-test an intervention that equips adolescents with skills to escape poverty and strengthens self-regulation, thus preventing adolescent depression and anxiety in urban LMIC settings. The study objectives are to: (1) develop a theoretical model of the causal mechanisms linking poverty, self-regulation, and depression and anxiety among adolescents (age 10-19 years); (2) collaboratively develop a multi-component selective prevention intervention targeting self-regulation and skills for academic and employment success among adolescents at high risk of developing depression or anxiety living in urban poverty in Colombia, Nepal and South Africa; (3) adapt and validate key instruments to measure eligibility, implementation, mediators, and outcomes of the intervention; and (4) undertake a 4-arm pilot randomized controlled trial of the selective prevention intervention in each site.
ZW Kracht-Guts-Krabbendam	Lydia Krabbendam, Nienke van Atteveldt & Barbara Braams	This project focuses on how young people grow up together in society; asking the question: how do young people develop into contributing members in society?
ERC StG N. Atteveldt BRAIN-BELIEFS	Nienke van Atteveldt	Questions underpinning this study are: Why do some adolescents avoid challenges, while others thrive at challenging school tasks? Why are some students more resilient to setbacks at school than others? In this project, we investigate the interplay between beliefs that students have about their abilities (mindset), how their functional brain networks for processing errors and feedback develop, and their actual learning trajectories and well-being in school.
EFG N. van Atteveldt	Nienke van Atteveldt and Tieme Janssen	Emerging Field group (EFG) on Portable Brain Technologies in Educational Neuroscience Research: In this EFG, we jointly explore the use of portable brain technologies to increase the ecological validity and worldwide implementation of educational neuroscience research.

3.1.3 Outreach and capacity-building

Some of the outreach activities of the group in 2022 are:

- March 22, 2022: Launch of the International Science and Evidence Based Education (ISEE) Assessment report. The ISEE Assessment is an initiative of the UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP), in collaboration with Learn! members of the Educational Neuroscience program. Read the report here: <https://mgiep.unesco.org/iseeareport>. Dutch article here: <https://didactiefonline.nl/artikel/unesco-vooruitgang-maar-ongelijkheid>
- April 7, 2022: Interview Radio 1 Spraakmakers, Nienke van Atteveldt: Onderwijs is te veel gericht op prestatie en te weinig op welzijn <https://www.nporadio1.nl/nieuws/achtergrond/215b6b14-1803-4277-bedc-e9f2a3fb704b/onderwijs-is-te-veel-gericht-op-prestatie-en-te-weinig-op-welzijn>
- April 8, 2022: Inaugural speech Nienke van Atteveldt "Leren of presteren? Hoe neurowetenschap, onderwijs en maatschappij te verbinden. Vrije Universiteit Amsterdam." Download link: <https://research.vu.nl/en/publications/leren-of-presteren-hoe-neurowetenschap-onderwijs-en-maatschappij>
- July 6, 2022: Interview Algemeen Dagblad (AD), Tieme Janssen: Onder professoren: Tieme laat pubers zien dat ze hun hersenen kunnen laten groeien, en dan krijgen ze zin om te leren
- Elsje van Bergen: Conference Keynote, Swiss Society for Early Childhood Research, Switzerland; Lecture for Stichting Lezen [Reading Foundation], Public talk about gene-environ-

ment interplay on child development, Amsterdam Young Academy

Members of the group participated in the following advisory boards:

Barbara Braams:

- Stichting Hoe?Zo! Show Utrecht | Bestuurder | 2020-02-27 - present
- Social Debt | Rotterdam | Adviseur | 2021-08-17 - present
- Vereniging Nederlandse Ontwikkelingspsychologie | Utrecht | Bestuurder | 2022-01-03 - present

Nienke van Atteveldt:

- Nederlands Kennisinstituut Dyslexie, Wetenschappelijke Advies Raad (WARD)
- Co-chair, International Science and Evidence Based Education (ISEE) Assessment, UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP).
- Vice President, International Mind, Brain and Education Society (IMBES)
- Editor-in-Chief, Nature Partner Journal Science of Learning

Elsje van Bergen:

- Scientific Advisory Board of the [International Dyslexia Association](#).
- [Amsterdam Young Academy](#) fellow
- [Jacobs Foundation Research Fellow](#)

Lydia Krabbendam

- RINO groep | Utrecht | Hoofddocent



Melanie Ehren

3.2 Educational governance, identity and diversity

The research on 'Educational governance, identity and diversity', chaired by Professor dr. Melanie Ehren and Professor Johannes Drerup spans educational governance of schools and systems in the widest sense, including leadership and management of schools, functioning of school boards and educational networks, their accountability and how performance, innovation and improvement of schools are coordinated through various types of governance (e.g. market-based, hierarchical steering or network governance). We also study and explore questions about which educational practices best facilitate the development of children into adults who are able to live in, and contribute to a society that is culturally and religiously diverse.

The programme combines insights from philosophy with insights from public administration to study and reflect on the functioning of schools and school systems and how they shape learning and development in schools and classrooms, including leadership, coordination of educational systems, school accountability, and purposes of education.

3.2.1 Staff

Professor dr. Melanie Ehren (program leader)

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Professor Johannes Derup (part-time, associated member)

Dr. Anders Schinkel (associate professor)

Dr. Marjolein Camphuijsen (assistant professor)

Dr. John Exalto

(assistant professor, until the 1st of September)

Dr. Cor van Montfort (senior researcher)

PhD students:

- Olamide David: Education Decentralization Policies in Sub-Saharan Africa (started February 2019)
- Sarah Seleznyov: Lesson study: an exploration of the successes and challenges of implementation beyond Japan through comparative case studies (started January 2020)
- Abongile Sonskosi: The future is female?: The experiences of black female doctoral candidates in South Africa and The Netherlands in RU and VU (started March 2021)
- Elsbeth Prins: Governance in cooperative networks for inclusive education, from a financial perspective (started January 2022)
- Tisja Korthals Altes: Inclusion in Higher Education: Higher Education Teachers' Understanding of- and Practices toward Inclusion (started March 2022)

3.2.2 Research highlights

Table 4 presents some of the research highlights and projects of the group.

Table 4. Research highlights Educational governance, identity and diversity'

Project	PI, team and funder	Key questions and findings
Accountability, capacity and trust to improve learning outcomes in South Africa; a systems approach	Professor Melanie Ehren (PI) Team: Jet Education Services (South Africa; Dr. Andrew Paterson), Open University UK (Dr. Jacqueline Baxter) Funder: ESRC (Economic and Social Science Research Council); DfID (UK Department for International Development)	This study ended in August 2022 with a final report of summary findings with further papers: <ul style="list-style-type: none"> Baxter, J. & Ehren, M.C.M. (2023). Factors contributing to and detracting from Relational trust in leadership: The case of primary schools in South Africa. <i>Frontiers in Education</i>. Ehren, M.C.M., Paterson, A., Camphuijsen, M.A., Baxter, J. (2022). High and low performing schools in South Africa: metaphors as a lens to understand teachers' views of school organisation. <i>International Journal of Educational Research</i>. https://doi.org/10.1016/j.ijer.2022.102094 A recording of the final workshop with outcomes of the project is here: https://www.jet.org.za/news/accountability-workshop
New Approaches in Inspection: A Polycentric Model	Professor Melanie Ehren EU, Erasmus+ programme	The project included the exchange of good practice with Turkish, Dutch, Bulgarian and Irish partners around inspections of educational networks. https://www.polycentricmodel.com/
External and Internal Supervision Methods and Modalities for Organizational Networks Addressing Complex Societal Issues (EISON)	Professor Melanie Ehren Dr. Cor van Montfort Dr. Marjolein Camphuijsen NWO (Dutch research council)	Designing, implementing and testing new internal and external supervision methods and modalities for organizational networks: methods and modalities that will contribute to the development of strong organizational networks and their collaborative work in addressing complex societal problems.
Aruba national audit office	Dr. Cor van Montfort (PI)	This project explores the financial management of a number of quasi-non-governmental organisations (Quangos) in Aruba.
Horizontal cooperation in Vocational Education (Horizontale samenwerking in de MBO-sector)	PI: prof. dr. Renée van Schoonhoven, VU Amsterdam Dr. Cor van Montfort Dr. Willeke Rietdijk Funder: Dutch Research Council (NRO)	This project explores how schools in vocational education work together with public and private partners and how these collaborations contribute to a responsive curriculum and regional innovation. We explored determinants for success and failure for such (public-private) cooperation and developed a design- and evaluation instrument with which institutions can analyze their partnerships. The project started in January 2020 and ended Dec. 2022.

3.2.3 Outreach and capacity-building

Educational governance

Dissemination and outreach in the area of educational governance included a series of talks, advisory boards, consultancies and professional development activities. The below list is not exclusive but provides an indication of the types of activities we engage in to share our work.

Professor Ehren:

- Expert consultant for ERI-SEE (Education Reform Initiative of South Eastern Europe Secretariat (ERI SEE Secretariat)- Enhancing quality of education and training in South Eastern Europe
- Expert consultant to review and design an inspection and assessment system, Morocco (OECD)
- Member of the Independent Review Group on Qualifications and Assessment in Scotland (Commissioned by the SQA, the Scottish Qualification Authority)
- Expert committee Ofqual-funded study on the resilience of the English qualification system (2022)
- Board member of VIDE (Dutch association of inspectors, evaluators and regulators)
- Board member of ICSEI, the international conference for school effectiveness and improvement

Dr. C. van Montfort

- Board member of the Dutch Education Council (Onderwijsraad)
- Member supervisory board Bazaltgroup
- Trainer 'philosophy and leadership' (in cooperation with Overdenkwerk)


Presentations and masterclasses

- Presentation VCO Oost-Nederland, The role of directors in the governance of schools, 10-3-2022 (online)
- Presentation (with Patrick Kenis) for the Inspection of Transport, Supervision in and on organization networks', 10-3-2022 (online)
- Visitor of a Vrije School in Leiden, 29-3-2022
- Presentation 'Supervision in and on networks' voor international projectteam 'New approaches in Inspection: A polycentric model', Vrije Universiteit Amsterdam, 1-4-2022
- Study day (together with Levinasinstituut), Supervision in and on organization networks' Supervision in and on organization networks', Soesterberg, 14 april 2022
- 'Reflections on networkvisitation', Tiwos, Tilburg, 20 april 2022
- Masterclass 'Supervision and networkvisitation', Bunnik, 14 juni 2022

 We combine insights from philosophy of education and public administration to study the functioning of schools and school systems.

Melanie Ehren

- Workshop (with M. Bokhorst en E. van de Bovenkamp), 'National Scienceagenda Supervision', Toezichtfestival, 16 juni 2022
- Workshop (with J. Raab, 'Supervision in and on organisation networks - preliminary research results', Toezichtfestival, 16 juni 2022
- Workshop 'Learning by accountability', jubileumcongres Infinite Financial, 23 juni 2022
- Masterclass 'Good governance, supervision and accountability', Master Educational Leadership, 30 juni 2022
- Presentation 'Good governance and organisation networks', 1 juli 2022
- Masterclass 'Public-private partnerships' (i.s.m. Van Doorne), 16-9-2022
- Masterclass 'Governance and supervision', Zijlstra-instituut VU, 20-09-2022
- Reflection on 'networkvisitation', Thuis in de wijk, 30-9-2022
- Visitor Vrije School GGCA, 5-10-2022
- Presentation research results 'sustainable public value creation by cooperation in vocational education', Platform VO-MBO Groningen, 6-10-2022
- Masterclass 'Good governance', course for starting administrators of schools, 13-10-2022
- Sparring session for input for founding an Housing academy, Autoriteit Woningcorporaties, 22-11-2022
- Interview (with Patrick Kenis) for article about the legitimization of organisation networks, Magazine P31, 22-11-2022

 Our continuous collaboration with policy-makers and practitioners ensures the societal relevance of the institute



Democratic education

The theory and practice of democratic education is a second theme in our programme, led by Professor Johannes Drerup. In 2022 Prof. Drerup published three edited volumes and two special issues on topics related to democratic education: *Liberal Democratic Education: A Paradigm in Crisis* (coedited with Anders Schinkel et al.; Mentis), *Bildung in post-kolonialen Konstellationen* (coedited with Phillip Knobloch; transcript), *Islamismusprävention in pädagogischen Handlungsfeldern. Rassismuskritische Perspektiven* (coedited with Caroline Boossong et al.; Bundeszentrale für politische Bildung), *How racism works. Systemic injustices and the (false) promises of education and – as a reaction to the war in Ukraine – Education in Times of War* (both coedited with Anders Schinkel et al.; On Education. Journal for Research and Debate). Other publications included papers on teaching controversial issues, identity politics, democratic education in the context of war and education for tolerance as well as a monograph, which provides an ethical analysis of the impact of the Covid-19 crisis on children (*Kinder, Corona und die Folgen. Eine kritische Bestandsaufnahme; Campus*).

Further examples of outreach by Professor Drerup are: A blog contribution on democratic education in times of war. <https://www.praefaktisch.de/krieg-und-frieden/nicht-werten-demokratieerziehung-in-zeiten-des-krieges/>

Organization of a Symposium on Contested Memories. *Democratic Education and the Politics of Remembrance in Transnational Perspective* in the context of the conference of the North American Association for Philosophy and Education (NAAPE) in Chicago (October 2022)

Organization of a Panel on New Directions in Global Citizenship Education in the context of the Twelfth Congress of the International Development Ethics Association in Medellin, Columbia (July 2022) (with Julian Culp and Subin Nijhawan)

Prof. Drerup also received a Fulbright visiting scholarship at UC Berkeley.

Dr. A. Schinkel

- External member of IREC (ICLON Research Ethics Committee, Leiden University)
- Participant in MiBo group, OGO-Vereniging (Developmental Education)
- Presentation *Werkplaats Pedagogische Ethiek*, Hogeschool Utrecht, location Amersfoort, 30-03-2022
- Presentation "Het belang van (diepe) verwondering voor het onderwijs", Bestuurdersnetwerk of 15 schools for secondary education, Garderen, 19-05-2022
- Brainstorm session on 'wonder-full' education at Academie Tien (secondary education, Utrecht), 17-05-2022

Dr. M.K. Camphuijsen

- Presentation 'Commercialisering in/van onderwijs en de implicaties voor goed onderwijs en kansgelijkheid', VU Pre-University College, 13-12-2022
- Paper presentation at the AERA 2022 annual meeting, San Diego (USA), 26-04-2022
- Organization of "The Reformed Project Final Conference", the Autonomous University of Barcelona (Spain), 15-06-2022-17-06-2022
- Research seminar 'LEARN!', 'Private provision of teaching services: Exploring trends and developments in temporary teachers in the Netherlands', 08-12-2022, online
- Blog LEARN! newsletter, 'Teacher employment agencies in education; a growing private industry?' 01-10-2022
- Blog LEARN! newsletter, 'Essays for sale; how often do students pay others to complete their assignments and what can we do about it?', 01-05-2022



3.3 Learning Sciences

The Learning Sciences programme is led by Prof. dr. Martijn Meeter and Prof. dr. Maartje Raijmakers. It includes research on learning processes in various contexts. Colleagues in the programme address individual differences in learning and ask questions such as “what determines individual differences in learning grades and in learning outcomes and



Martijn Meeter

motivation?” This research serves to understand individual learning processes and how these vary by students’ background characteristics and interact with the context in which learning takes place (classroom/ school).

The programme includes several thematic areas, such as motivation and success in higher education, subject-specific didactics, behavioural management, and individual differences in learning outcomes (linked to current concerns about growing inequality). Past work has also included research on student collaboration and collaborative learning.

3.3.1 Staff

- Professor dr. Martijn Meeter (program leader)
m.meeter@vu.nl
- Professor dr. Maartje Raijmakers
m.e.j.raijmakers@vu.nl
- Dr. Ilja Cornelisz (associate professor)
- Dr. Chris van Klaveren (associate professor)
- Dr. Menno van der Schoot (associate professor)
- Dr. Jan Baan (assistant professor)
- Dr. Marjolein Dobber (assistant professor)
- Dr. Sui Lin Goei (assistant professor)
- Dr. Anne Fleur Kortekaas (assistant professor)
- Dr. Chiel van der Veen (associate professor)
- Dr. Anne de Bruijn (assistant professor)
- Dr. Melvin Vooren (assistant professor)
- Dr. Bregje de Vries (assistant professor)
- Dr. Hanna Westbroek (assistant professor)
- Dr. Femke van der Wilt (assistant professor)
- Dr. Ralf van Griethuijsen (research associate)
- Dr. L. de Koning (research associate)
- Dr. Lisa van der Sande (research associate)
- Dr. Tom Stolp (research associate)
- Dr. Sebastiaan Donszelmann (lecturer)
- Dr. Kokkie van Oeveren (lecturer)
- Dr. Iris Pauw (lecturer)

PhD students:

Two new PhD students joined the research programme. Liu Meimei started a PhD on interactions between achievement and motivation, Brittney Root one about predicting trajectories of students within special education. Nicolette van Halem graduated in 2022, Christiane Nieuwmeijer early in 2023.

The following PhD students are part of the programme:

- Iris Bogaers, silence in the classroom (start sep 2021)
- Laurens de Croes, Effects of educational setting on children with special needs (start dec 2019)
- Femke Dijkstra, Performing in stressful situations (start jul 2017)
- Irene Eegdeman, Study succes in upper vocational (start aug 2016)
- Lex Freund, Learning analytics of student engagement (start jan 2021)
- Chantal van Helden, Education of children with autism (start sep 2021)
- Mirella Jongsma, ICT support in university science education (nov 2020)
- Peter Langerak, Math education in primary school (start sep 2021)
- Li JiaJia, Developing a design-based making pedagogy (start jan 2021)
- Liu Meimei, Integrative Model of Motivation, Time Investment and Achievement (start sep 2022)
- Erik Meij, Influence of teachers’ knowledge of learning on pedagogical reasoning (start sep 2019)
- Christiane Nieuwmeijer, Professional development in musical play (start 2015)
- Koen Ottenhof, Towards multiperspective reasoning in secondary science education (start oct 2018)
- Simone Plak, Models of intelligence and learning (start aug 2018)
- Jannette Prins, Effects of nature-rich playgrounds on young children (start at VU nov 2020)
- Brittney Root, Predicting learning in special education (start nov 2022)
- Eline van Rossum, Quality of preschool education (start may 2018)
- Anni Sapountzi, Automated assessment of mastery (start nov 2017)
- Tessa Slim, Science and technology in primary education (start feb 2019)
- Mireille Smits, Developing social skills through play (start nov 2019)
- Elisabeth Wynberg, Manipulative- and object-oriented play and education (start mar 2019)

3.3.2 Research highlights

Research highlights of the programme are presented in table 5.

Table 5. Research highlights Learning Sciences

Project	PI, team and funder	Key questions and findings
COVID-19 pandemic & education	Dobber, Ehren, Kortekaas-Rijlaarsdam, Meeter; Funder: NRO/OCW	In the final year of a research program on remediation after the COVID19 pandemic and associated school closures, we produced a final report, which concluded that school-organized remediation programs have led to a decrease in learning arrears, but that not every program was equally successful nor were arrears eliminated.
Promising interventions	de Bruijn, van der Wilt, van der Veen Funder: NRO	LEARN! researchers won two tenders (out of 10) to evaluate interventions. One of these focuses on supporting language development during Kindergarten, the other on redeveloping school grounds to stimulate movement in primary school students.
OB1, a model of reading	Meeter, van der Schoot, Cauchi, Lopes Rego Funder: NWO, Fyssen foundation	What are the processes behind reading? That is the main question addressed by the OB1 computational model. Thanks to an NWO grant to Meeter/vd Schoot and a Fyssen Foundation grant for Cauchi to do a postdoc with Meeter, work on this model will undergo a step change in the coming years
Activating, Blended Education	Meeter, van Griethuijsen Funder: VUA	Vrije Universiteit Amsterdam made activating blended education one of its key priorities. It tasked LEARN! researchers with investigating the extent to which it is already implemented, and how this will change through the years.
Motivation - achievement interactionsy	Meeter, van Atteveldt, Vu, Liu Funder: CSC	Following up on a model of motivation-achievement interactions, and with help of PhD student Liu (funded by a CSC scholarship), researchers of the Learning Sciences and Educational Neuroscience investigate these interactions in longitudinal designs
Education Network Amsterdam (ONA)	Cornelisz, van Klaveren; Funder: municipality Amsterdam	ACLA was chosen as a partner by the city of Amsterdam in helping schools improve after COVID, funded by the National Programme to repair learning loss. It helped set up the Education Network Amsterdam that marries direct help to schools with research and development.
National Growth Fund (NGF): Ontwikkelkracht	Cornelisz, van Klaveren; Funder: Ministry of Education, Culture and Science	ACLA was chosen as a scientific partner by the ministry of Education, Culture and Science in the National Growth Fund (NGF) project Ontwikkelkracht. The main objective is to coordinate and organize the first two (out of six) co-creation labs, in which scientists, educators and policy makers actively collaborate on specific themes in addressing current issues in education, diagnose underlying causes, and implement and evaluate educational and policy interventions.
ZG Zorg in Beeld: Auditief	Heppe, Cornelisz, van Klaveren; Funder: ZonMW	ACLA & Kentalis start a 4-year during project in which big data analysis is used to improve labour market and education participation for persons with a hearing impairment.



3.3.3 Outreach and capacity-building

Researchers in the learning sciences were involved in various dissemination and impact activities:

- Raijmakers was a member of a standing scientific committee advising the Ministry of Education on the new curriculum for primary and secondary education. Dobber was part of an expert panel on the transition from Early Childhood Education to Primary Education, advising the ministries of Social Affairs and of Education. Meeter helped develop the cross-departmental research agenda on digital society of the Dutch government, and advised the Ministries of Finance and of Education on instruments to improve education.
- Kortekaas-Rijlaarsdam became chair of the interuniversity committee for primary teacher education and received a grant to organize structural collaboration with schools for teacher education.
- Meeter advised the Inspection of Education on their new framework for interventions.
- Van der Veen was member of the academic council of the Child and Family Blog (childandfamilyblog.com) as well as the science committee of the Association of Educationalists in the Netherlands (NVO).
- During the year, Meeter was interviewed as an expert in the media seven times, six times for Dutch media and once for a British science magazine. He published four opinion articles on class management and on evidence-based education.
- Van der Wilt has become a member of the Amsterdam Young Academy. She was, for one last year, a member of the editorial board of a Dutch professional magazine directed at teachers in primary education, JSW (www.jsw.nl). Anne de Bruijn joined JSW's editorial board.
- Members of the program gave several talks and workshops for professionals and policy makers. Raijmakers and Kortekaas-Rijlaarsdam organized a workshop, with others, on the importance objective cognitive tests in primary education (May '22), and one on Education and data driven technology (Kennisset, Nov '22). Van der Veen was a speaker at a national Language Network day organized by SLO. Meeter presented on motivation and achievement at the OPeRA Amsterdam network of schools and higher education institutions (Dec. '22).



3.4 Motivation for lifelong learning in the health professions – Developing students for life

The programme’s subtitle, developing students for life reveals the aim of this research programme: to develop intrinsically motivated learners. The programme is led by dr. Rashmi Kusrkar from the Amsterdam University Medical Centre (Amsterdam UMC) and focuses on ensuring a sustainable health services workforce and the learning and development of health professionals.

In healthcare, professionals need to be able and willing to constantly interact with their environment, integrate learning and practice, and invest in their continuing professional development. Research has shown that healthcare professionals are likely to be adaptive if they possess autonomous motivation for the field and are willing to regularly invest in contemporary knowledge and

skills. This requires a mindset that is ideally developed early in their career, such as in their under-graduate and graduate training in medical school, by nurturing their autonomous motivation and professional identity for lifelong learning.

The programme builds on the principles of self-determination theory to study and develop students’ and healthcare professionals’ motivation, spanning the initial stages of applying to a medical degree programme (undergraduate and postgraduate Health Professions Education; HPE) to continuous professional development later in their career. The work aims to ensure an inclusive environment for lifelong learning of diverse student groups who may have unequal access and opportunities to/for learning.

Underpinning questions are: how can we enhance motivation of HPE students and health professionals to optimise their learning? How can we ensure an inclusive environment where students from various backgrounds can learn and develop their autonomous motivation for lifelong learning?

3.4.1 Staff

Professor dr. Rashmi Kusrkar (program leader) r.kusrkar@amsterdamumc.nl
 Dr. Anne de la Croix (assistant professor)
 Dr. Anouk Wouters (assistant professor)
 Dr. Neha Basnet (research associate – until May 2022)

PhD students:

- Joyce Kors - Autonomy supportive patient consultations - January 2018
- Malou Stoffels - Optimizing school- supported clinical learning: an investigation in the context of nursing education - January 2018
- Jettie Vreugdenhil - Clinical reasoning in nurses and nursing students - September 2018
- Jan Willem Grijpma - Small group Active Learning in medical students - February 2018
- Lianne Mulder - Selecting a representative student population for healthcare provision in a diverse society - April 2019
- Siema Ramdas - How is Teacher Identity associated with the willingness to adopt educational change

regarding Diversity and Inclusion in higher education? - September 2022

- Lucille Malan – joint PhD student with Sefako Magatho University, South Africa - January 2020

External PhD students:

Marnix Westein (Utrecht University, January 2016), Yuanyuan Zhu (University of Maastricht, January 2021), Adam Gavarkos (IHPME, University of Toronto, Canada, January 2020), Joram Pach (Vrije Universiteit, Amsterdam, September 2021), Carolyn Teuwen (Vrije Universiteit, December 2016), Sven Schaepekens (Erasmus University Medical Centre), Femke Dijkstra (Vrije Universiteit, Amsterdam), Kate McCarthy (University College London)

Research assistant: Louti Broeksma

Rashmi Kusrkar has been appointed as Professor (Chair: Inclusion and Motivation in Health Professions Education) at Amsterdam UMC location Vrije Universiteit from December 2022.

3.4.2 Research highlights

In table 6 we present the key projects of the programme in 2022.

Table 6. Research highlights Motivation for lifelong learning

Project	PI, team and funder	Key questions and findings
JEDI Now! Developing a co-creative knowledge platform and methods to achieve justice equity diversity and inclusion (JEDI) in higher education for Dutch with a migrant background	Rashmi Kusrkar (PI), Maurice Crul (Vrije Universiteit), Tahir Abbas (Universiteit Leiden), David Keyson (TU Delft), Sabine Oertelt-Prigione (Radboud UMC), Boya Li (Leiden Universiteit), K Maeve Powlick (Vrije Universiteit). Funding by: NWO (Consortium Grant) €325.000	Diversity is a prerequisite for creativity in organizations and for ensuring the well-being of its members. Although there is knowledge about JEDI (justice equity diversity inclusion), its impact remains limited to the level of discrete initiatives. There is urgency for sharing JEDI expertise and knowledge, and determining its applicability across institutions. This research proposal aims to build a JEDI platform which will connect institutes, synthesize knowledge, generate insights, develop research methods and advise interventions and investigate if this process is equitable
Caring together, learning together: parents of care-intensive children in health care education	Anne de la Croix (This project is a large collaborative project with several educational organizations/departments in HPE) Funding: NWO Comenius Senior Fellowship Grant, €99.928	Medical students and other future health care professionals need to be more sensitive to the patient journey, care networks, and professions outside the hospital. In this project, parents of children with disabilities are introduced as educational partners. These parents form a rich learning resource due to their knowledge and experience. Parents get educational training and are collected in a 'parent database' so they can participate in multiple modules and courses. This innovation is characterised by collaboration and inter-disciplinarity. It creates understanding of the patient journey, knowledge of care networks, awareness of a career outside the hospital, and empathy in communication.
Learning in and across communities of practice: health professions education students' learning from boundary crossing	Malou Stoffels (PhD student), Stéphanie van der Burgt (co-advisor), Larissa Bronkhorst, Hester Daelmans (co-advisor), Saskia Peerdeman (advisor), Kusrkar RA (PI and advisor). Published in: Adv in Health Sci Educ 2022, Early Online. https://doi.org/10.1007/s10459-022-10135-5	Learning to adapt to new contexts is crucial in health professions education. Boundaries between and within contexts challenge continuity in students' learning processes. In this study, we investigated how and what nursing students learn from boundary experiences while they are simultaneously growing into a community of practice. Using a boundary-crossing lens, experiences of discontinuity were identified in pre-placement and post-placement interviews and diary fragments with 14 nursing students during their placement in an academic hospital. We found that students experience discontinuity as a result of different approaches to nursing care and to learning, both between (academic and clinical) settings and within a setting. When students feel safe enough, they can convert boundary experiences into meaningful learning situations, such as critical discussions with staff.


		Successfully overcoming boundary experiences improves students' understanding of healthcare and professional development and helps them to develop a personal approach to learning. Students critically address boundary experiences when they are motivated to learn and when they perceive a violation of ethical standards but not when they are concerned that it will affect their assessment. Objects designed to bridge theory and practice can generate additional barriers. The findings can be used to design future boundary objects.
Autonomy-supportive decision-making in maternity care during prenatal consultations: a qualitative interaction analysis.	Joyce Kors (PhD student), Anne de la Croix, Martin L (co-advisor), Corinne Verhoeven (co-advisor), Petra Bakker, Saskia Peerdeman (advisor), Kusrkar RA (PI and advisor). Published in: BMJ Open, 2022;12:e063463.	The aim of this study was to identify mechanisms of autonomy-supportive consultation that maternity care professionals use during decision-making in prenatal consultations. The results of this study show that the model of autonomy-supportive consultation can be enriched by adding minimising language and humour to the mechanisms that can be used to fulfil the psychological need 'relatedness'. Second, our results show that professionals use only few mechanisms to meet the patients' psychological needs 'competence' and 'autonomy'. They mainly use information giving to meet patients' need competence. To meet patients' need for autonomy, the professionals keep all options open. This suggests that professionals could pay more attention to other mechanisms to meet patients' needs for 'competence' and 'autonomy'.
Changes in student appreciation of small-group active learning: a follow-up q methodological study.	Jan Willem Grijpma (PhD student) Anne de la Croix (Daily supervisor) Martijn Meeter (Supervisor) Rashmi Kusrkar (Supervisor) Published in: International Journal of Educational Research Open, 2022; 3: 100199.	This follow-up study included 20 medical Bachelor students and showed how and why medical students' appreciation of small-group active learning changed over time along with development of their epistemic beliefs and approaches to learning. What motivates and engages first-year students is not necessarily motivating and engaging for students in later stages. This article was published in a special issue on the use of 'q' method, so it contributed to the advancement of research methodology alongside its practical significance for how to support the development of interventions that can help teachers in active learning settings.
The leaky pipeline of publications and knowledge generation in medical education.	Rashmi Kusrkar (PI) Published in: Perspectives on Medical Education, 2022; 11: 70-72.	The medical education literature is dominated by publications from authors from the Global North. The Global South authors and their knowledge is neither included nor acknowledged in the global medical education knowledge synthesis. Rashmi Kusrkar comes from a Global South country (India) and in this article she has highlighted the lack of inclusive practices in the medical education publication landscape and what can be done to become more inclusive. This article is a representation of a leadership role which challenges the status quo in the field.

One of the flagship research projects of the group is our NRO consortium project titled **“Unintended effects of selection on medical student and applicant diversity: What can we do about this?”**. This consortium comprises members from Erasmus MC, UMC Groningen, University of Twente, Utrecht University - Pharmacy, Amsterdam UMC location AMC, alongside LEARN! members Rashmi Kusurkar (consortium leader), Anouk Wouters and Lianne Mulder. The project aimed to provide recommendations for the selection of students for health care training programs through two PhD projects. The overarching research question was “How can we select a group of students for health care training programs that is representative of the Dutch population?”. In Lianne Mulder’s PhD project, we investigated the diversity and representativeness of medical student populations, physicians and medical specialists, inequality of opportunity in selection, and support for policies to address this inequality. In Suzanne Fikrat’s PhD project (registered at Erasmus MC), we examined the effect of different selection procedures on diversity, as well as candidates’ perceptions of different selection methods and the underlying values.

Results of this project: The combined use of lottery and selection for admission to health care programs (from 2000-2017) was already associated with inequality of opportunity; this increased in the transition to 100% selection. Men, candidates without parents with a BIG-registered profession, candidates with a Turkish, Moroccan, Surinamese or Dutch Caribbean migration background, and candidates whose parents do not belong to the wealthiest 10% of the population have a significantly lower chance of admission. The use of traditional selection methods (grades, biomedical knowledge test), which particularly appeal to candidates’ cognitive skills, seems to disadvantage candidates with a lower socioeconomic status. In contrast, candidates with a migration background seem to be particularly disadvantaged by the use of a CV and curriculum sampling test, instruments that are more adapted to the curriculum of the program. For these last two methods, then, we saw that effects on diversity varied across programs, due to strong dependence on context.

At the same time, the studies suggest that reintroducing the lottery is unlikely to have the desired effect because the candidate pool is already not a representative reflection of society. Moreover, there is little support for the lottery among candidates. Candidates preferred selection methods on which they can show more than just their cognitive abilities and they have a sense of control. The inequality of opportunity found is not reflected in candidates’ perceptions of different selection methods; these were similar for subgroups of candidates. Candidates did worry about inequality of opportunity in a



 Candidates preferred selection methods on which they can show more than just their cognitive abilities and they have a sense of control

large number of methods because of unequal access to tutoring, coaching and a medical network. In fact, having access to such a medical network was found to be the most important helping factor in making a study choice for a medical school, and in preparing for the selection process.

In terms of solution approaches, we found broad support for the use of procedures that take into account the context in which results are obtained (Contextualized Admissions) to promote opportunities of candidates with lower socioeconomic status, parents on welfare benefits, an underrepresented migrant background, and/or asylum status holders; and Bonded Medical Places for candidates from the Dutch Caribbean, who thereby pledge to provide care there for a number of years after graduation in exchange for guaranteed admission. The following publications resulted from this project:

- Mulder L, Wouters A, Fikrat-Wevers S, Koster AS, Ravesloot JH, Croiset G, Kusurkar RA. Influence of social networks in healthcare on preparation for selection procedures of health professions education: a Dutch interview study. *BMJ Open* 2022;12:e062474. <https://bmjopen.bmj.com/content/12/10/e062474>
- Mulder L, Wouters A, Twisk J, Koster AS, Akwiwu EU, Ravesloot JH, Croiset G, Kusurkar RA. Selection

for health professions education leads to decreased student diversity in The Netherlands, but lottery is no solution: a retrospective multi-cohort study. *Medical Teacher* 2022; 44:7, 790-799. doi.org/10.1080/0142159X.2022.2041189

- Fikrat-Wevers S, Stegers-Jager KM, Afonso PM, Koster AS, Van Gestel RA, Groenier M, Ravesloot JH, Wouters A, Van Den Broek WW, Woltman AM. Selection tools and student diversity in health professions education: a multi-site study. *Advances in Health Sciences Education* 2023; Early Online. <https://doi.org/10.1007/s10459-022-10204-9>
- Fikrat-Wevers S, Stegers-Jager KM, Groenier M, Koster AS, Ravesloot JH, Van Gestel RA, Wouters A, Van Den Broek WW, Woltman AM. Applicant perceptions of selection methods for health professions education: rationales and subgroup differences. *Med Educ.* 2022;1-16.

This project has received major attention from the media. Our work was cited in several newspapers and magazines (NRC, Science Guide, Trouw, De Volkskrant, etc.) in relation to the current debate in the Netherlands on changing the law to make weighted lottery possible again for admission to HPE.

The two PhD students have given several presentations to different stakeholders. Lianne Mulder has given >50 presentations to stakeholders related to policy making (such as the Ministry of Education, Science and Culture, Inspectorate of Education) and was invited to the House of Representatives (De Tweede Kamer) for a discussion on provision of equitable healthcare. Our team was the runner-up for the Amsterdam UMC External Visibility Award 2022. Lianne Mulder was awarded the 2nd place for her poster presentation on this project at the Amsterdam UMC Science Awards 2022.



3.4.3 Outreach and capacity-building

The following list includes examples of outreach activities in 2022:

- Visited University College London, UK, as Honorary Lecturer in November 2022 - Anouk Wouters
- Member of Scientific Committee of the Dutch Medical Education Association (NVMO) - Anouk Wouters
- Member of the Executive Committee of the Association of Medical Education in Europe (AMEE) - Rashmi Kusurkar
- Chair Elect of the Fellowship Committee of the Association of Medical Education in Europe (AMEE) - Rashmi Kusurkar
- AMEE Conference Organizing Committee 2022 - Rashmi Kusurkar
- Appointment as Faculty - Status Only, Institute of Health Policy, Management and Evaluation, University of Toronto, Canada - Rashmi Kusurkar
- Chair of "Fringe" sessions at Association of Medical Education in Europe (AMEE) Conferences - Anne de la Croix
- Associate Editor, *Perspectives on Medical Education* - Rashmi Kusurkar
- Associate Editor, *BMC Medical Education* - Rashmi Kusurkar
- Associate Editor, *Medical Teacher* - Rashmi Kusurkar
- Associate Editor and Section Editor for "A qualitative space," *Perspectives on Medical Education* - Anne de la Croix
- Associate Editor, *BMC Medical Education* - Anouk Wouters
- Lianne Mulder has given >50 presentations to stakeholders related to policy making (such as the Ministry of Education, Science and Culture, Inspectorate of Higher Education) and was invited to the House of Commons (De Tweede Kamer) for a discussion on provision of equitable healthcare. This project has received major attention from the Media. Her work was cited in several newspapers and magazines (NRC, Science Guide, etc.) in relation to the current debate in the Netherlands on changing the law to make weighted lottery possible again for admission to HPE.
- Anne de la Croix conducts a large collaborative project on making a Disabled Children's Parents Bank in order to include them in teaching students in Health Professions Education on how to communicate with and handle these special children and their families.

3.5 Child rearing

In this program, we ask how parents, teachers, and other formal and informal educators may help children to find their place within society and become the persons they want to be. We pursue these questions by working together with parents, professionals, teachers, experts by experience and policy makers, so that our research is not only scientifically valuable but societally actionable as well.

Broadly speaking, parents and educators provide control and protection, guidance of children's learning, entry within peer groups, and create a nurturing family and school climate. These efforts contribute to socialization, character building, and socioemotional resilience. The research lines within this programme consist of studies and projects that are sometimes stand-alone but more often are part of long-running collaborative infrastructures that have been built over the years. These infrastructures include the academic collaborative centers (Bartiméus-VU; Viveon; Child Abuse), the Generations²-cohort study, and the Consortium for Attachment Research Synthesis (CARS).



Carlo Schuengel

3.5.1 Staff

Professor dr. Carlo Schuengel (program leader)
c.schuengel@vu.nl
 Professor dr Paula Sterkenburg
 Professor dr. Marian Bakermans Kranenburg (until June 2022)
 Dr. Ina Koning (associate professor)
 Dr. Mirjam Oosterman (associate professor)
 Dr. Marije Verhage (associate professor)
 Dr. Agnes Willemen (associate professor)
 Dr. Lianne Bakkum (assistant professor)
 Dr. Sabin Kef (assistant professor; until August 2022)
 Dr. Marleen de Moor (assistant professor; until April 2022)
 Dr. Clasiën de Schipper (assistant professor)
 Dr. Anne Tharner (assistant professor)
 Dr. Linda Douma (research associate; until January 2022)



'Child rearing' is about understanding parenting, attachment, and self-determination in family settings.



Dr. Aline Honingh (research associate)
 Dr. Mathilde Overbeek (research associate)
 Dr. Irene Pappa (research associate)
 Dr. Simone van der Plas (research associate)
 Dr. Edith Rot (research associate; until April 2022)
 Dr. Stefania Vacaru (research associate)
 Dr. Marjolein Vandenbosch (research associate)
 Dr. Marieke Werkman (research associate)
 Drs. Renata Janssen (lecturer)
 Drs. Saskia van der Weck (lecturer)
 Dr. Or. Dagan (visiting fellow)
 Dr. Madelon Hendricx - Riem (visiting fellow)
 Dr. Eline Heppe (visiting fellow)
 Professor dr. Pol van Lier (visiting fellow)
 Dr. Martine Verhees (visiting fellow)

PhD candidates

- Hinke Drijver (start 1-6-2021); psychometric qualities of the Diagnostic Instrument Adaptive Behavior (DIAG) for persons with a moderate to profound intellectual disability.
- Esther Bisschops (start 1-12-2018); implementatie van 3 innovaties om onvrijwillige zorg en vrijheidsbeperkingen terug te dringen in de zorg voor mensen met een verstandelijke beperking
- Jessica Braakman (start 2022); Mentalization Based Treatment and care for adults with a visual impairment and psychological problems
- Suzanne Derks (start 2019); Effectiveness of the serious game 'You & I' in changing mentalizing abilities of adults with mild to borderline intellectual disabilities
- Tanja Doodeman (start 1-10-2018); Adjust and stimulate
- Marja Eding (start 1-1-2022); : Learning potential of children with moderate to severe intellectual disability
- Debora van Elst (start 2020); Tijd en tijdsbeleving van mensen met een (visuele en) matige of lichte verstandelijke beperking
- Mirte Forrer (start 1-7-2017); Parenting at risk
- Helen Korving (start 2018); Attachment, social relationships and pain in children or adults with intellectual disability
- Yvonne Kruihof (start 2022); Children with visual and intellectual disability

- Beanka Meddeler - Polman (start 2022); Attachment and trauma
- Ahmed Mohamed (start 12-12-2017); Assessing the efficacy of an attachment-based parenting intervention in parents of children with intellectual disabilities in South Africa
- Nathalie Patty (start 1-5-2021); Burnout among parents of children with complex care needs
- Kim Starreveld (start 2020); VIPP-School: Using video-feedback to enhance teacher sensitivity
- Jacqueline van Tuyll van Serooskerken (start 15-12-2016); Exploring parental understanding of self-determination by people with severe or profound intellectual and multiple disabilities: a life course perspective
- Jolanda Westera (start 1-9-2018); Prevalentie, beloop en behandeling van (sociale) angst bij jongeren met een licht verstandelijke beperking
- Ruud Wong Chung (start 1-1-2016); 1,2,3 Naar eigen regie?! vergroten van competenties van kinderrevalidatie professionals om zelfmanagement van ouders van kinderen met een chronische aandoening te faciliteren
- Mirjam Wouda (start 2022); HiSense
- Valerie Fictorie (start 1-1-2020); Recovering from domestic violence: Families and children
- Lianne van Setten (start 1-11-2017); Go explore the world! De rol van opvoeding in de motorische ontwikkeling van het kind
- Annaleena Holopainen (start 1-7-2020); Stress around birth and parenting
- Elise Peters (start 2017-end 2022); Bed, Bath, and Beyond: Nature Interventions to Support Family Life in Dutch Women's Shelters and Shelters for Homeless Families
- Linda Messemaker-Veerman (start 2021); Well-being and quality of life of siblings of children with intellectual disabilities (ID) and/or visual impairment (VI)

3.5.2 Research highlights

Table 7 includes an overview of the main projects from the childrearing programme.

Table 7. Research highlights Childrearing

Project	PI, team and funder	Key questions and findings
Network for self-determination of people with disabilities and intensive care needs (Netwerk Samen Kunnen Kiezen)	Carlo Schuengel & Petri Embregts, 2016-2022, ZonMw NPG	<ul style="list-style-type: none"> To investigate experiences around using care data for research Longitudinal impact of basic psychological needs among people with mild intellectual disability Meaning of basic psychological needs and self-determination for people with profound and multiple intellectual disability (Van Tuyl van Serooskerken); publication in 2022 focused on parental views on eliciting self-determination
Consortium for Attachment Transmission Synthesis	Marije Verhage, 2018-2022, NWO VENI	Better understand the phenomenon of intergenerational linkages in attachment through individual participant data meta-analysis.
The autonomy of adolescents with a visual impairment and autonomy supporting practices of parents and professionals	Sabina Kef, 2019-2022, ZonMw Inzicht	Gaining insight into satisfaction of the need for autonomy among young people with visual impairment as well as insight into autonomy support by parents and care staff.
Assessing parental sensitivity in child welfare practice	Mirjam Oosterman & Carlo Schuengel, 2018-2022, Municipality Amsterdam/Pro Juventute foundation Amsterdam	Developing and testing the OKI app and e-learning suite for assessing parental sensitivity in daily child welfare practice; studying its implementation (Mirte Forrer).
What do we tell the parents: Impact of sexual abuse on parents and families	Caroline Jonkman, 2021-2023, SASS	How can professionals strike a proper balance in sharing or withholding from parents concrete details of sexual abuse committed against their children?
Consortium Individual Development work package 2: Effects of interventions	Marian Bakermans, 2018-2023, NWO Gravitation	Which children are most susceptible to environmental influences, and what are the neurobiological mechanisms by which the environment influences children's social competence and behavioural control? These questions are addressed experimentally in longitudinal randomized controlled trials (Annemieke Witte; Jana Runze).
Secure base script knowledge: Antecedents and sequelae	Marije Verhage & Carlo Schuengel (co-PIs), 2021-2025, NIH R01 Roisman	Testing the incremental and concurrent validity of the secure base script knowledge coding system on two large corpora of Adult Attachment Interviews, the SECCYD and CATS.
Fast forward and Rewind	Caroline Jonkman & Carlo Schuengel, 2019-2024, ZonMw Geweld Hoort Nergens Thuis	Testing family-based intensive trauma therapy for adolescents with complex psychological trauma (Valerie Fictorie).
Parents in Balance	Van Meeteren, Patty, Willemen, Schuengel, Ketelaar, 2022-2025, SWO/Viveon	Parenting burnout and resilience among parents of children with long-term care needs

Nurturing social relationships in formal educational and care settings

Social relationships and ICT: Fostering coping, autonomy, and wellbeing (Sociale relaties en ICT: bevorderen van coping, autonomie en welzijn)	Paula Sterkenburg, 2016-2022, ZonMw NPG	<ul style="list-style-type: none"> To develop a serious game (You & I) to promote mentalization among people with mild intellectual disability (Suzanne Derks). To develop and test the instrument "Connect & Stimulate" for parents and care staff of people with profound and multiple intellectual disability (Tanja Doodeman). Develop and test the HiSense app for parents and care staff of people with mild-to-moderate intellectual disability.
Profound Intellectual and Multiple Disabilities and ICT (Netwerk EMB & ICT)	Paula Sterkenburg, 2016-2022, ZonMw NPG	<ul style="list-style-type: none"> Assessing pain using the smart sock and app Connect & Stimulate, a tool for parents and professionals to build awareness of fluctuations in arousal and response alternatives ICT toolkit: how to use ICT for creating value for quality of life of individuals with PIMD
Freedom & security; Scaling up and scaling out of methods for reducing restraints in the care for people with intellectual disability and challenging behavior (Vrijheid en veiligheid: Uit- en opschalen van methodieken gericht op afbouw van vrijheidsbeperking van mensen met moeilijk verstaanbaar gedrag en matige of ernstige verstandelijke beperkingen)	Carlo Schuengel & Petri Embregts, 2018-2023, ZonMw NPG	<ul style="list-style-type: none"> Investigate the effectiveness of (1) multi-disciplinary expertise team; (2) through other eyes; (3) deliberative framework for involuntary care. Understand implementation mechanisms through the lens of Normalization Process Theory (Esther Bisschops). Publications in 2022 focused on recognizing implementation mechanisms and on effects of implementing the new Care & Coercion law on involuntary care registrations.
Virtual social contact for people with disabilities (Digitaal op Bezoek)	Anne Tharner & Carlo Schuengel, 2020-2022, ZonMw COVID-19	Describing the experiences and needs during pandemic lockdowns in residential care for people with disabilities around virtual forms of social contact; translation into guidance for increasing the opportunities for virtual contact.
HiSense for taxi drivers of people with disabilities	Paula Sterkenburg, 2019-2022, municipality Haarlemmermeer	To adapt and test an app to support understanding and sensitivity of special transportation taxi drivers.
DIAG (Diagnostisch Instrument Adaptief Gedrag)	Hinke Drijver, Carlo Schuengel, Robert Didden, 2021-2025, SWO/Viveon/ multiple funders	Testing and implementing a new brief instrument for direct care staff to screen level of adaptive functioning in people with moderate to serious intellectual disability
Learning Potential	Marja Eding, Carlo Schuengel, Martijn Meeter, 2022-2026, SWO/Viveon	Development and testing of a dynamic assessment procedure for learning potential of children with moderate to serious intellectual disability
VIPP-School	Mathilde Overbeek, Marian Bakermans-Kranenburg, & Agnes Willemen, 2020-2024, NRO	Developing and testing the effectiveness of an adapted version of a video feedback intervention for positive parenting to be used to support teacher relationships with kindergarten children with disruptive behavior (Kim Starreveld).



Decline in functioning, now what? Ageing of adults with a visual impairment and a mild to moderate intellectual disability

Paula Sterkenburg & Erik Olsman, 2022-2026, ZonMw InZicht

Understanding the impact of aging and dementia of people with visual impairment and ID from a social relationships perspective.

Improved assessment = improved care: Differential diagnosis of attachment problems and Autism Spectrum Disorder in adults with a visual impairment and/or moderate to borderline intellectual disability

Paula Sterkenburg, Suzanne Derks, Annelies Bildt, 2022-2024, ZonMw Expertisefunctie zintuiglijke beperkingen

How can differential diagnosis of autism and attachment problems be achieved?

Habituation of visual aids (Brilgewenning bij mensen met een matig tot licht verstandelijke beperking)

Hilberink, Frederiks, Sterkenburg, 2022-2023, ZonMw Expertisefunctie zintuiglijke beperkingen

Describe the effects of wearing spectacles by people with moderate to severe intellectual disability, to support shared decision making with caregivers considering whether to seek visual aids

3.4.3 Outreach and capacity-building

A selection of activities of the group are listed below:

- AttachmentOpen was launched (www.attachmentopen.org) which is an interactive platform for making attachment research data available to researchers and students, making classic and IPD meta-analysis transparent and reproducible, and fostering understanding of attachment research within the broader public. The meta.attachmentopen.org website provides a platform for interactively exploring published classic meta-analyses, as well as providing updated estimates of effect sizes as new studies are added. The cats.attachmentopen.org website provides a platform for exploring individual participant data meta-analysis of studies within the consortium of attachment transmission synthesis (CATS).
- Explanations of attachment theoretical concepts was launched through the website of the Society for Emotion and Attachment Studies (<https://seasinternational.org/explanations-of-attachment-theoretical-concepts/>). This glossarium of often-misunderstood or misattributed terms in public and professional discourse was developed by an international team led by Marije Verhage and Anne Tharner from our research program, based also on consultation with stakeholders in practice. A version in Dutch is planned for 2023.
- Incubator sessions were organized by Viveon with practitioners, experts by experience, policy makers, and researchers around current themes within the field of care for people with intellectual disabilities. These included the theme of the 'flourishing professional' and people with mild intellectual disability.
- Network meetings were organized by the Academic Collaborative Center for social relationships & ICT around the themes of time management, trust, pain, and compassion.
- In a collaboration of multiple academic collaborative centers, led by Viveon, a webinar was given on supporting online communication by people with disabilities, facilitated by Kennisplein Gehandicaptensector.
- The website www.digitaalopbezoek.nl was launched for people with disabilities, caregivers, professionals, and managers to find information and guidance with using this complement/alternative to in-person interaction.
- Viveon and the ACC Bartimeus-VU contributed to the 's Heeren Loo academy webinar on challenging behavior
- The International Attachment Conference in Lisbon featured multiple contributions from researchers from our program, with contributions to the organization of the conference by Schuengel and Bakermans-Kranenburg.
- invitational talks were given for professional audiences by Schuengel (LVB-conference), Sterkenburg (EAMHID NEED, clinics in Germany)
- In 2022, www.inkaart.org was launched, a research register for people with developmental problems and their parents. In Kaart was developed by steering committee with researchers, professionals, and experts by experience and is meant to facilitate research on development, functioning, and quality of life, as well as increase the visibility of this population and their needs in society.

4. Our collaboration with LEARN! Academy



LEARN! Academy is the centre for professional development of teachers in higher education (and particularly VU teachers) at the VU. The centre is, despite having a similar name as our research institute, a separate organizational entity within the VU. As we have a shared interest and disciplinary focus on learning and development, we have started to explore further collaboration in the past year. Examples are incorporating research outcomes in teacher professional development programmes or involving teachers in research activities.

The journal club meetings continued in 2022 with monthly discussions of research articles, focusing on a different topic each month. January for example included a discussion of the characteristics of an expert university teacher and in February we discussed the meaning of the term 'Covid-generation' in relation to student wellbeing.

The journal clubs worked with a format of close reading where participants used FeedbackFruits to comment on papers prior to the journal club. In FeedbackFruits, colleagues can read the article in advance and note their thoughts and these were then discussed in more detail during the meeting. The purpose of the JC is to learn together and stay aware of recent developments in education.

In 2021 we started our collaboration with a series of journal clubs where colleagues from LEARN! academy (Janneke Waelen) and LEARN! research institute (Jan Willem Grijpma; Rashmi Kusurkar from the 'motivation for lifelearning' programme) discuss research papers.

 LEARN! Academy is the centre for professional development of teachers in higher education (and particularly VU teachers) at the VU.

5. Event and seminars in 2022

Our calendar of events and seminars includes research seminars, informal lunches for PhD students, an annual conference, and introductory meetings for new members. The table on the right provides an overview of all the events in 2022 by date.



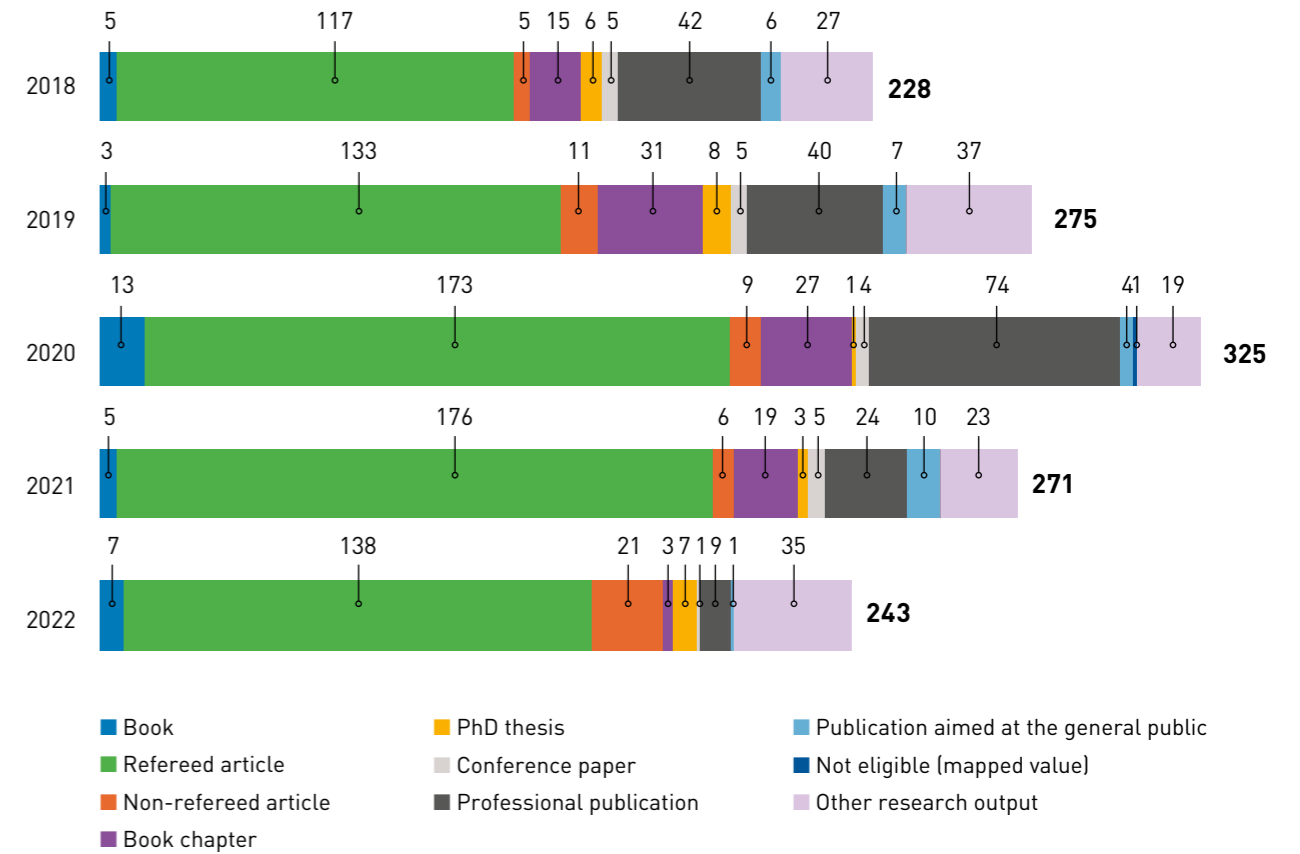
2021	Date	Event
January	25	LEARN! seminar with Nienke van Atteveldt: Co-chairing UNESCO's International Scientific Evidence-Based Education Assessment: lessons learned
February	1	LEARN! Seminar with Iroise Dumotheil: Executive functions and academic achievement
	14	LEARN! PhD lunch hosted by Martijn Meeter
	22	LEARN! Seminar with Margherita Malanchini: Genetic and environmental influences on neurodevelopmental disorders and common co-occurring conditions in childhood and adolescence: a meta-analysis
March	8	LEARN! Seminar with Sotiria Grek: The making of the European Education Area 2025; the many faces and functions of quality assurance in Higher Education in Europe
	24	LEARN! Annual Conference with: <ul style="list-style-type: none"> • Keynote by: Filip Van Droogenbroeck : Does the School Context Really Matter for Teacher Burnout? Review of Existing Multilevel Teacher Burnout Research • Melanie Ehren: Schools as sorting machinesL implications for students' development of in and outgroup trust • Nienke van Atteveldt: What are the social-emotional, motivational, meta-cognitive and contextual factors needed for children to thrive in school? • Rashmi Kusurkar: Fostering motivation for learning: Getting the best out of students • PhD presentations about: parenting stress, teacher-child relationships, methods to study, transition in education and positive parenting • Martijn Meeter: Individual differences in learning and education: an overview of approaches in different sectors • Carlo Schuengel: Adult-child relations and attachment: lessons for educators
May	17	LEARN! PhD lunch hosted by Nienke van Atteveldt
	31	LEARN! Seminar with Dieter Baeyens: The role of teacher-student interactions in EF performance and development: an investigation of the causality and universality of the relationship
June	7	LEARN! Seminar with: Antonina Levatino
	22	LEARN!/iBBA symposium: Motivation: from science to application?
July	5	LEARN! Seminar with Junlin Yu: How mindsets create complex motivational systems and are shaped by school context
September	13	LEARN! Seminar with Abongile Sonkosi: The future is female?: The experiences of black female doctoral candidates in South Africa and the Netherlands in RU en VU
	14	LEARN! PhD lunch hosted by Carlo Schuengel
	21	LEARN! Bi-Annual Introduction Meeting
	23	LEARN! Seminar with Daniel Oduro: Community and parent involvement in basic education in rural Ghana
October	6	LEARN! Seminar with Işıl Sincer
November	8	LEARN! Seminar with Ron Oostdam: Effects of the Covid-19 school lockdowns on language and math performance of students in elementary schools: Implications for educational practice and reducing inequality
	21	Visitation LEARN!
December	8	LEARN! Seminar with Tom Stolp and Marjolein Camphuijsen: Private provision of teaching services: Exploring trends and developments in temporary teachers in the Netherlands
	15	LEARN! PhD lunch hosted by Rashmi Kusurkar



6. Facts and figures

6.1 Research output

The table below provides an overview of our research output from the past couple of years.

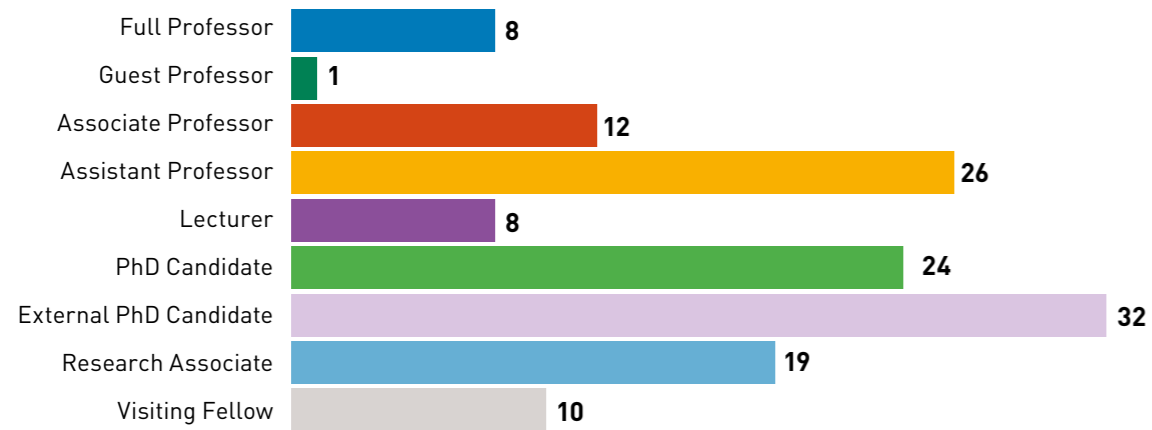


A word cloud from the titles of all our publications shows that education, development, and research into attachment relations featured mostly in our publications in 2022. This is a reflection of the size of our programmes with the majority of our members working in the Learning Sciences and Childrearing programmes.

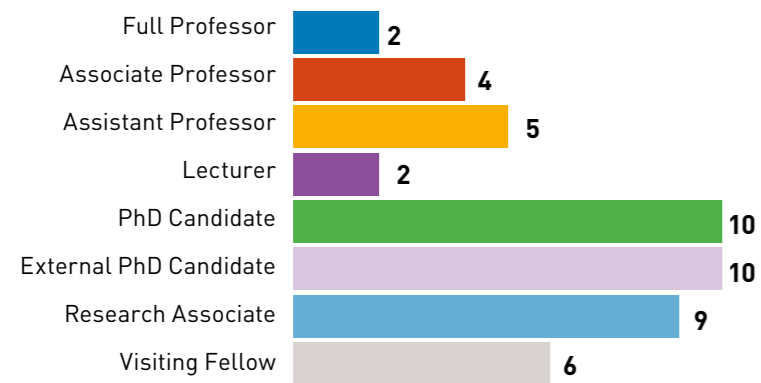
6.3 Research staff

The staff in our institute are presented below according to academic role in each of the programmes. The institute has a total of 127 staff with 7 full professors, 9 visiting fellows and diversity in staff in terms of seniority of roles. The largest programmes of work are in Child Rearing and Learning Sciences.

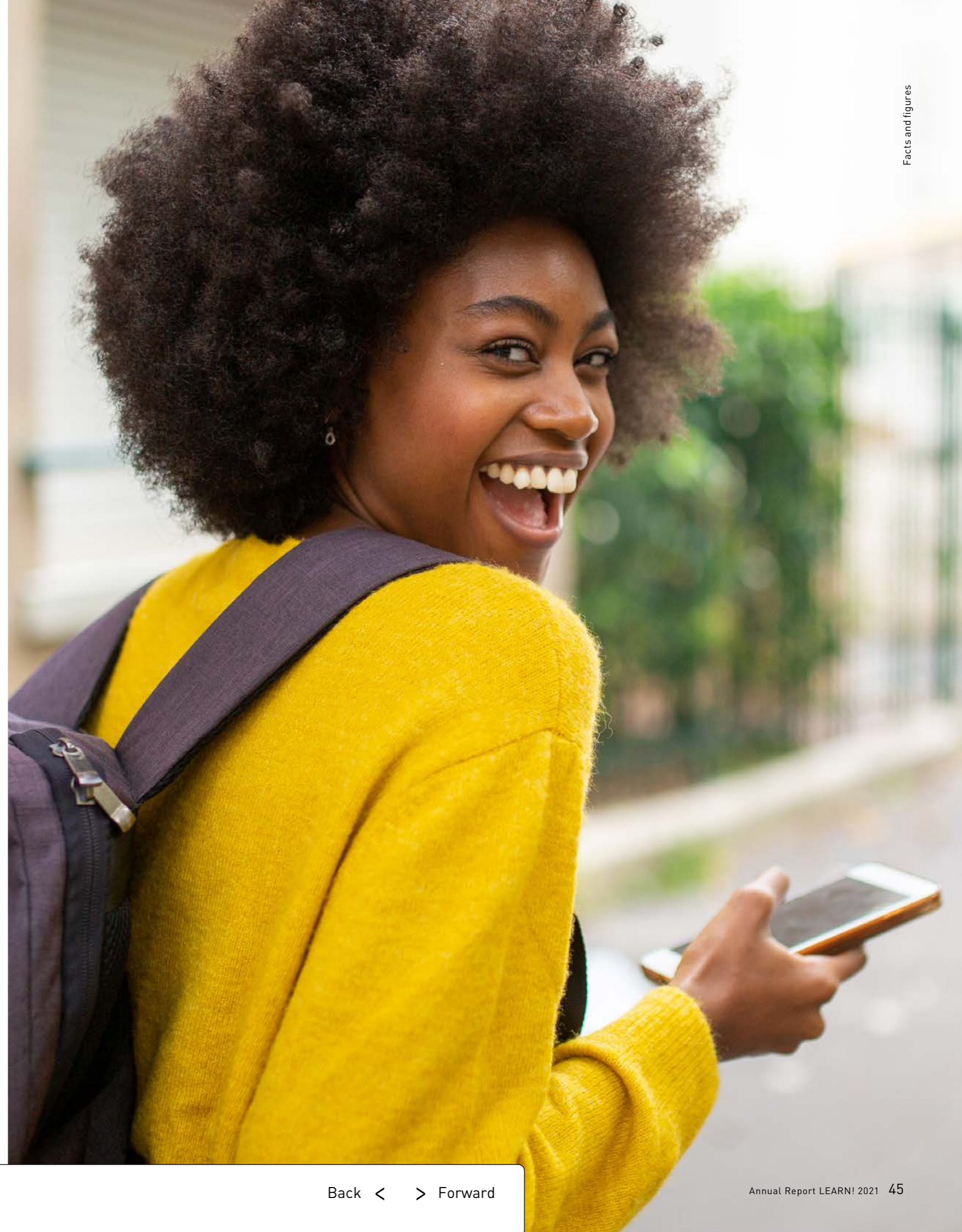
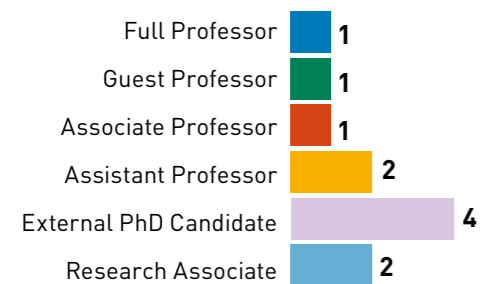
LEARN!



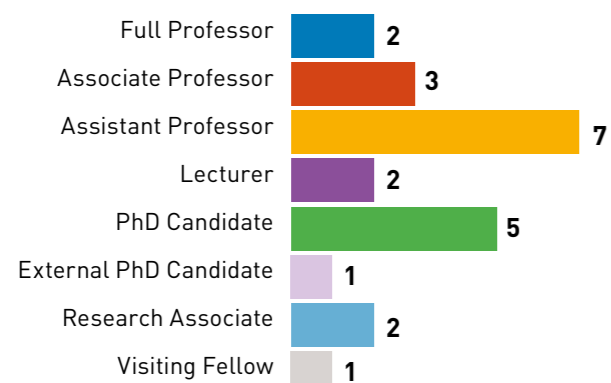
LEARN! - Child rearing



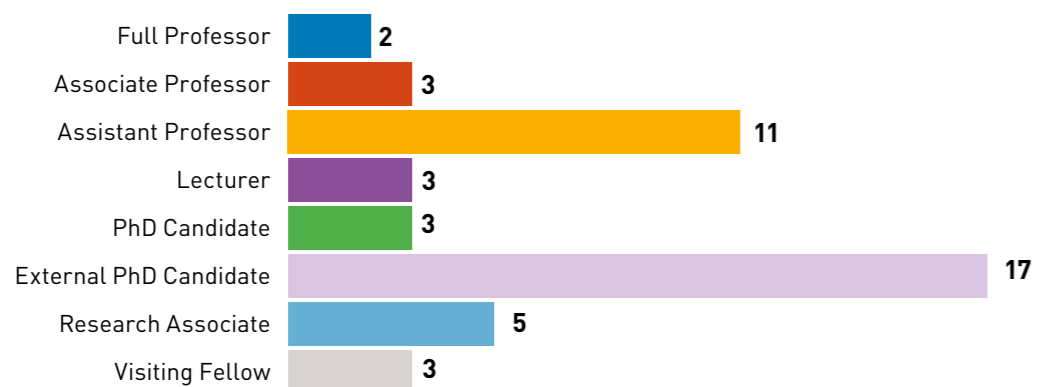
LEARN! - Educational governance, identity and diversity



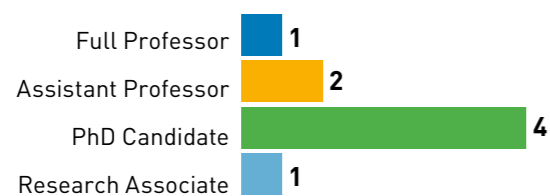
LEARN! - Educational Neuroscience, learning and development



LEARN! - Learning Sciences



LEARN! - Motivation for a lifelong learning



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