

Annual report **LEARN! 2023**



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1. Introduction

2023 was the first truly post-covid year and it was a delight that most of our events and meetings were face to face again. We continued our regular newsletter and seminars and also held our annual conference in November, organized with EducationLab around the theme of 'evidence-informed policy and practice in education'. The opportunities for post-pandemic travel allowed international colleagues to visit us for brief research stays and visiting scholarships.

2023 also offered an opportunity to reflect on the external audit report that was issued at the end of the previous year. The panel praised the institute for its clear identity, as well as the clear focus on interdisciplinary and collaborative research on learning and development. Other strengths identified by the panel were the societal relevance of its research, its open academic culture and its contributions to open science, most notably through a variety of stakeholder collaborations and transparent data management and storage for national and international partners. LEARN! was considered exemplary in developing open science and creating an open, multi-perspective, transparent, and welcoming academic culture. Throughout 2023 we continued to build our informal network structure with opportunities for LEARN! members to meet, collaborate and share ideas.

During the annual conference at the end of 2023, Professor Ehren handed over the role of director to Professor van Atteveldt who will continue the work with the development of a new

strategic plan that will address some of the areas identified by the audit panel, including the identification of focus areas, the collaboration between the five programmes, further enhance the inclusive nature and diversity of membership of the institute and increase the support and monitoring of PhD students. As always, we are committed to our mission which is summarised as:

LEARN! is an interdisciplinary research institute on learning in an institutional and societal context. We study learning and development and the context in which people learn and develop.

Professor Dr. Melanie Ehren
Director of LEARN! 2019-2023

Professor Dr. Nienke van Atteveldt
Incoming Director of LEARN!



Nienke van Atteveldt

During the annual conference at the end of 2023, Professor Ehren handed over the role of director to Professor van Atteveldt



With members from different departments and Faculties, and across VU and Amsterdam UMC, LEARN! is a place where different perspectives and approaches meet and merge.

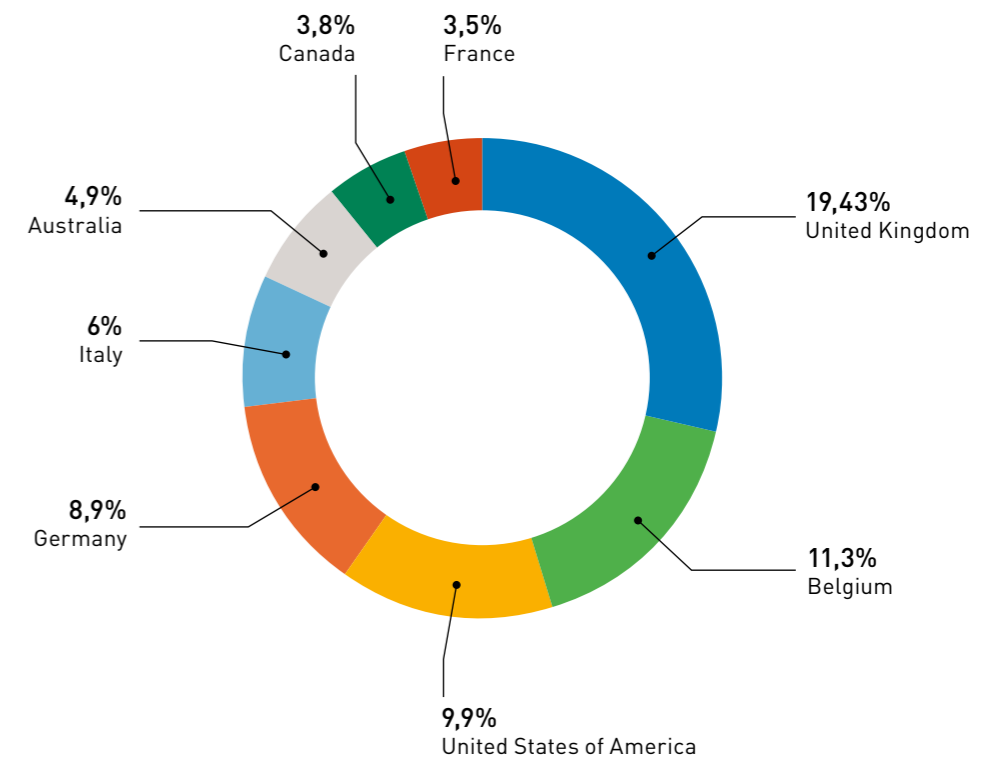
2. Where we work and who we work with

2.1 Where we work

Within the Vrije Universiteit, we have members in three departments of the Faculty of Behavioural and Movement Sciences: Educational and Family Studies, Biological Psychology and Clinical, Neuro- and Developmental Psychology. In addition, we have members in the Faculty of Religion and Theology and one of our research programs is located within the Amsterdam UMC (VUmc). In the Netherlands, we have established a number of partnerships with, for example, the Inspectorate of Education, care centres, and partner universities on projects and publications (see 2.2). These are included in our programme descriptions below. Furthermore,

we are part of the 'Samenwerkingsverband Onderwijs en Opvoeding Amsterdam', together with the UvA and HvA.

Our international co-authors on publications are from UK, the United States, Australia, Canada, and various countries in Europe (e.g. Germany, Belgium, Italy). We work across a total of 30 countries; the table below includes an overview of co-authors' countries that are represented on more than 3% of our publications. We have included the organisational affiliations of our top two countries, the UK and Belgium, later in this section.

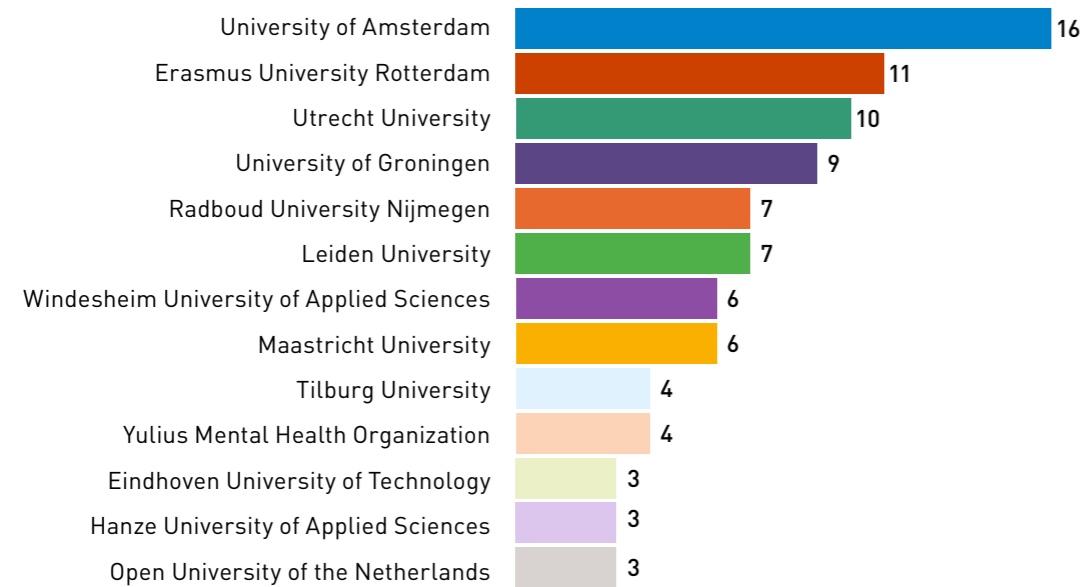


2.2 Who we work with

The below figure provides a breakdown of organisations we co-publish with within the Netherlands. The list is longer than the organisations listed here as some organisations are included on only one publication.

The figure demonstrates our strong collaboration in publications with the University of Amsterdam, Erasmus University in Rotterdam, University of Utrecht, University of Groningen, Tilburg University, and Leiden University.

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



We treasure our strong collaborations with other (applied) universities to jointly work on common goals for improving conditions for optimal development and flourishing.





Our five work programmes each have their own focus, but many shared interests and active collaborations.

3. Our programme of work

3.1 Educational Neuroscience; brain, learning and development

How can developmental and biological perspectives help us understand learning and behaviour of children and adolescents in educational contexts? Our research focuses on social-emotional, motivational and meta-cognitive factors to understand what is needed for children to do well and feel well in school. In addition to child factors, our program generates novel insights into how individual

development is influenced by the environment, such as the peer context in the classroom, and gene-environment interplay. Throughout our work we use and further develop research approaches which are ecologically valid (i.e., situated and implemented in real-life settings, rather than lab environments) to ensure our findings have direct relevance for education.

3.1.1 Staff

- Professor dr. Nienke van Atteveldt (programme chair; n.m.van.atteveldt@vu.nl)
- Professor dr. Lydia Krabbendam
- Dr. Elsje van Bergen (associate professor)
- Dr. Barbara Braams (associate professor)
- Dr. Mariët van Buuren (assistant professor)
- Dr. Bruno Sauce (assistant professor)
- Dr. Tieme Janssen (assistant professor)
- Dr. Tuongvan Vu (assistant professor)
- Dr. Marieke Buil (assistant professor)
- Dr. Fanny de Swart (assistant professor)
- Dr. Hester Sijtsma (Research Associate)

PhD students:

- Sibel Altikulac
- Ilona Benneker
- Josi Bernardo
- Perline Demange (defended her thesis in October, 2023)
- Laura Fornari
- Nil Horoz
- Sofieke Kevenaar (defended her thesis in October, 2023)
- Christel Klootwijk
- Smiddy Nieuwenhuis
- Jule Schretzmeir
- Iris Siemons
- Zenab Tamimy
- Elise van Triest

3.1.2 Research highlights

Project	PI, team and funder	Key questions and findings
Emerging Field Group on Portable Brain Technologies in Educational Neuroscience Research	Nienke van Atteveldt and Tieme Janssen; funders: EARLI / Jacobs Foundation	This EFG explored the use of portable brain technologies to increase the ecological validity and worldwide implementation of educational neuroscience research. In March 2023, we hosted a 2-day event with talks and hands-on workshops at the VU.
NWO Effectmeting kansrijke interventie: High-Dosage Tutoring	Nienke van Atteveldt (PI, VU), Tieme Janssen (VU), Jurgen Tijms (PI, UvA). Funder: NWO.	The aim of this research is to test effectiveness of the High Dosage Tutoring (HDT) maths intervention by conducting a randomized controlled trial (RCT) in practical (pro) and pre-vocational secondary education (VMBO). Cognitive as well as socio-emotional effects will be monitored.
First mindset, then treatment: An RCT of a growth mindset intervention to increase efficacy of dyslexia treatment	Tieme Janssen (PI); Van Atteveldt, van Triest, Bonte (Maastricht University), Tijms (Rudolf Berlin Centre, UvA); UD starter grant	This RCT explores the effects of a growth mindset intervention tailored to children with dyslexia, on improving efficacy of dyslexia treatment. Outcomes include standardized tests of reading and spelling, neural correlates of error processing and behavioural measures of effort investment (finished homework, challenge seeking).
Growing Up Together in Society (GUTS)	Lydia Krabbendam, co-PI's Barbara Braams & Nienke van Atteveldt. Funder: NWO Gravitation Program	How do young people successfully grow up in an increasingly complex society, and what are the main causes for differences in contributing to society? With the GUTS research program we study the vital question: How do neurobiological and social-cognitive development interact with social (relations with family and peers) and societal (families' social-economic status) opportunities?
Neural representations of self-concept in adolescence: individual differences in the development and outcomes.	Mariët van Buuren (PI), TuongVan Vu, Zwanet Young, Lydia Krabbendam. UD Startersbeurs (in collaboration with GUTS)	What are predictors of individual differences in neural representations of self-concept & self-concept clarity and how do these neural representations affect social functioning and academic motivation in adolescence? In 2023, we conducted a pilot study in 37 healthy adults.
Mental health in adolescence: the role of stigma in social networks	Mariët van Buuren (PI). Funders: Stichting tot Steun VCVGZ & Ammodo Award 2020	The aims of this study are to investigate how self-stigma and personal stigma affect peer relationships of adolescents with subclinical psychopathology and how daily social interactions affect, and are affected by, self-stigma. In addition, we aim to elucidate the association between self-concept and self-stigma. In 2023, the first cohort of 390 participants completed the study and a second cohort of 150 participants finished the first measurement.

SCCILLS: SEL Coaching Central and Integral in the skills of Student, Teacher and School	Fanny de Swart, Marieke Buil, Iris Siemons. Funders: NRO; Hermen J. Jacobsfonds; promotievoucher Hogeschool Rotterdam	Project SCCILLS aims to stimulate Social and Emotional Learning (SEL) in elementary school children via the daily teacher-child relationship and teaching practices in order to maintain and improve positive child behavioural, emotional and social development, classroom climate and teacher-wellbeing.
The influence of Household and school-level SES-inequalities on elementary schoolchildren's social, emotional, behavioural and academic development	Marieke Buil (PI), Nil Horoz; UD Starters Grant	This project aims to examine the association between household- and school level SES and the development of social- and emotional learning (SEL) components; and whether school SES relates to teacher burnout symptoms, classroom climate, teacher-child relationship, as well as parental school involvement and their academical expectations.
Why do educational difficulties run in families? Genetically-sensitive observational and intervention research on the home learning environment	Elsje van Bergen, Norwegian Research Council, project GenEd, 335634	Our overarching aim is to discover which aspects of the home learning environment causally increase or decrease children's risk of poor achievement and Attention Deficit Hyperactivity Disorder (ADHD). We will do so collecting and using Dutch and Norwegian data. The project started August 2023 with two research assistants.
Learning @ home: How do genes, environments, and interventions co-act to shape learning?	Elsje van Bergen, Jacobs Foundation Research Fellow	Children who do well in school typically have parents who played counting games and read to them. The opposite is true for children from less stimulating homes. Although this association between parents' behaviour and children's outcomes has been seen as cause and effect, it is important to acknowledge that parents provide their children with more than just a nurturing environment – they also provide them with their genes. Only when we account for genetics or conduct an RCT can we determine the causal impacts of the home learning environment. The fellowship started January 2023. @ jacobsfoundation.org/fellows/jacobs-foundation-research-fellowship-en/elsje-van-bergen

Flagship project: Growing Up Together in Society (GUTS)

GUTS is a highly interdisciplinary team science effort, and several LEARN members from the Educational Neuroscience program are involved. GUTS is a 10-year program, funded by the NWO Gravitation Program and includes scientists from 9 Dutch universities. LEARN's Lydia Krabbendam is one of the PI's, and Barbara Braams and Nienke van Atteveldt are co-PI's. Other LEARN members participating in GUTS are Tieme Janssen and Mariët van Buuren (as co-promoters) and Jule Schretzmeir (as PhD student).

The goal of this project is to understand how young people grow up in increasingly complex societies and make contributions to society: by studying individual neurobiological development in relation to educational processes, social networks, and societal norms, including antisocial behaviour. Across different workpackages, neuroscience will be integrated with individual and environmental factors to develop an integrative framework on self-regulation development and contributions to society that will have explanatory as well as predictive power across multiple domains of functioning in adolescence and early adulthood.

One of the work packages (WP1) focuses on SES and Education, and this is the WP where LEARN researchers are most active. WP1 will identify how social and societal opportunities impact short- and long-term individual, academic, and social outcomes in adolescence and emerging adulthood, tailored toward diversity in socio-economic status. Two longitudinal cohort-sequential MRI studies at two sites (Erasmus University Rotterdam and VU University) will be the basis for a comprehensive test-replication design by direct comparison between longitudinal waves. LEARN subprojects within this WP are for example the PhD project of Jule Schretzmeir (supervised by Nienke van Atteveldt and Tieme Janssen), which is aimed to better understand academic risk-taking (e.g., how adolescents deal with challenges in their school work), and whether the current risk-avoidant society with increasing performance pressure limits the space for such adaptive forms of risk-taking. Another LEARN project within this WP is led by Mariët van Buuren, and focuses on neural representations of self-concept & self-concept clarity and how these affect social functioning and academic motivation in adolescence.

The GUTS program officially started with the GUTS conference that took place on October 10-11 in the Trippenhuis in Amsterdam. This kick-off conference brought together scientists from different disciplines to jointly the interplay between individual neurobiological

development and the diverse social and societal opportunities that shape young people's paths. Keynotes were delivered by world-leading experts such as Sarah-Jayne Blakemore (UCL), Ron Dahl (University of California, Berkely), Andrew Fuligni (UCLA) and our own Lydia Krabbendam.

For more information, see: www.gutsproject.com

3.1.3 Outreach and capacity-building

Dissemination and outreach in the area of brain development and learning included, for example:

- **Workshop Mobile Neuroimaging Technology:** organized by Tieme Janssen and Nienke van Atteveldt, March 13-14, VU Amsterdam. Participants joined from diverse universities in the Netherlands and internationally, and also within the VU from different departments. The workshop hosted two keynote speakers and four workshops: mobile EEG, mobile fNIRS, transparent EEG and wearable sensors/EMA.
- **March 16: seminar on Reimagining Education:** Key findings and recommendations from the ISEEA report. Speakers were dr. Anantha K. Duraiappah (Director, UNESCO MGIEP) and Nienke van Atteveldt, and they jointly presented the approach and main findings of the report. During the Q&A, we had a discussion about the ISEEA's implications for education practice and policy. In addition to learn! members and other researchers, policymakers and school practitioners also participated in this event.
- **March 24: Keynote Nienke van Atteveldt at the annual conference for school psychologists ('Schoolpsychologencongres') about the interplay between motivation and performance.** The key message for school psychologists was that due to the complexity of learning and development, a too narrow view of (cognitive) school performance is not optimal. The interaction between motivation and performance can be positively influenced at school by placing more emphasis on learning than on performance.
- **Tieme Janssen has provided several Mindset Masterclasses for secondary education teachers:** in several high schools, teachers learn about the basics of mindset, the latest research on this topic, and apply what they learn to their own teaching during various exercises.
- **May 2023: Marieke Buil gave a keynote on Reimagining Education: Key findings and recommendations from the ISEEA report,** during the yearly national Leve het Onderwijs conference (together with dr. Annelinde Vandenbroucke; Leiden University). Marieke presented the key findings and

recommendations of the UNESCO ISEEA report and its implications for education practice and policy. Stichting Leve het Onderwijs is a movement of school administrators who advocate new ways of governing schools and evaluating learners' progress, focused on potential rather than one-size-fits all performance evaluation. School administrators, education policy makers and teachers attended this keynote.

- **March 2023: Podcast contribution to "Jeugdzorg en Onderwijs: hoe nu verder?"** with (former) Dutch politician René Peters. Nil Horoz and Marieke Buil (VU), together with Tanja Houweling (Erasmus MC) and René Peters discussed the influence of household- and school SES-inequality on child development: [Listen on Spotify](#)
- **December 2023: Radio interview (BNR) with Elsje van Bergen 'DNA influences both working attitude and school grades'**, programme Wetenschap Vandaag [Science Today]: [Listen on bnr.nl](#)
- **September 2023: Elsje van Bergen was interviewed about her research on the influence of genes and environment on behaviour for an article in the New Scientist:** [Interview on individualdevelopment.nl](#)

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

3.2.1 Staff

- Professor dr. Melanie Ehren (programme chair; m.c.m.ehren@vu.nl)
- Professor dr. Johannes Drerup (part-time)
- Professor dr. Gerdine Betram - Troost (full professor)
- Dr. Anders Schinkel (associate professor)
- Dr. Marjolein Camphuisen (assistant professor)
- Dr. Anouk Zuurmond (assistant professor)
- Dr. John Exalto (assistant professor)
- Dr. Cor van Montfort (senior researcher)
- Dr. Willeke Rietdijk (visiting fellow)
- Dr. Nienke Ruijs (visiting fellow)

PhD students

- Olamide David
- Sarah Seleznyov
- Elsbeth Prins



3.2.2 Research highlights

Project	PI, team and funder	Key questions and findings
Teacher accountability to improve learning outcomes; synthesis of 4 RLO-studies	PI: Professor Melanie Ehren with a team from UC Berkeley, Bristol University and Washington University in St. Louis. Funded by the UK Economic and Social Research Council	The project includes a further analysis and synthesis of findings from four recent studies in South Africa (Ehren), India and Nepal (Shields), Honduras (Murphy-Graham) and Afghanistan and Pakistan (Train) to answer the questions: 1. How do teachers across the four studies understand their accountability? To whom do they feel accountable and for what? 2. What are the conditions by which teachers take active agency in their professional accountability instead of passively complying to external standards? The synthesis provides insights on effective teacher accountability (practices and teacher mindsets) from these countries and how the school, community and national context influences teachers' understanding and enactment of external accountability.
External and internal supervision arrangements for organisational networks addressing complex societal issues in education, social housing, justice and security, and health. (EISON)	Professor Ehren and dr. van Montfort with a team of researchers from Tilburg University and four inspection agencies. Funded by the NWO (Dutch research council) and Dutch national inspection council	The project investigates accountability of organisational networks in four domains, including education. In the first phase we described the functioning and outcomes of the participating networks and how they are held accountable. We also completed a literature review on empirical studies of accountability of educational networks to better understand effective accountability modalities. The next design phase will include the development and testing of new inspection methods with the Dutch Inspectorate of education.
Education Inspection Framework Review	Professor Melanie Ehren. Funded by Ofsted, the English Inspectorate of Education.	The work included a systematic literature review and workshop with senior HMI to develop a research strategy to evaluate the Education Inspection Framework.
Trust and integrity in the context of school inspections	Professor Melanie Ehren with dr Frederique Six. Funded by Ofsted, the English Inspectorate of Education.	The work resulted in an essay for Ofsted on organisational and system-level trust of their inspections.
Aruba national audit office	Dr. Cor van Montfort	Evaluation and capacity-building of the national audit office

Citizenship in education	Dr. Anouk Zuurmond Funded by the NRO	On 23 January 2023, a final conference took place to mark the end of a four-year research project, funded by NRO, on citizenship education in Dutch vocational education. This research project resulted in research findings on strategies for critical thinking, teaching materials, and a theoretical framework underpinning the combination of critical thinking, Bildung, and citizenship education. The research report for academics can be found here , a report for professionals can be found here (all in Dutch). Our website contains many teaching materials, including a book with tools and lessons plans for citizenship education in vocational education and training.
Teacher Lab	Dr. Marjolein Camphuijsen (funded by the Dutch government)	Teacher Lab: project focused on the use of flexible contracts in the education sector. Key outputs: first round of data-collection has been completed. 25 interview transcripts with teachers are currently being analysed. Second round of data-collection is currently being prepared. Interview protocol has been developed.
The educational importance of wonder	Dr. Anders Schinkel	A paper with Evelien Broekhof is currently under review with <i>Personality and Individual Differences</i> . The question we set out to answer was whether it's possible to map children's sense of wonder. The paper reports on the development and validation of the Wonder Chart, an instrument that enables us to assess children's proneness to wonder and what they wonder about. Another paper (written in 2023, forthcoming in 2024) addressed the question whether wondering about ourselves as animals can decenter us, ethically speaking. It engages with the idea of human exceptionality (among animals, or living beings generally), arguing that this idea, although empirically in many ways exaggerated, and morally problematic when it lends support to anthropocentrism, cannot plausibly be discarded altogether – in fact, morality presupposes it.
Education in the Anthropocene	Dr. Anders Schinkel	Key question here is the relevance of the current planetary ecological crises for education and philosophy of education. Work is ongoing – see publication list.

3.2.3 Outreach and capacity-building

A selection of dissemination and outreach in the area of inspection and accountability for improvement included:

Professor Melanie Ehren held the following roles, and served on the following committees in 2023:

- Chair of the NRO programme committee of Dutch educational research (8th of December 2023)
- A member of the Dutch ministerial committee to monitor the evaluation of the National Programme of Education (aimed to reduce inequality and improve learning outcomes in literacy and numeracy) (2023-2024/6)
- Board member of ICSEI (the International Congress for school Effectiveness and School Improvement (2022-2023))
- Member of the AQA research committee in the UK
- Board member of VIDE; Association of Evaluators, Regulators and Inspectorates in the Netherlands (2020-)
- Associated expert the European Institute of Education and Social Policy (EIESP) (2020-)
- Member of the advisory board 'internal quality assurance structures in primary and secondary education'; Regioplan (2022-2023)
- Member of the advisory board 'evaluating the stimulating role of the Dutch school inspection framework'; Regioplan (2023)

Professor Johannes Drerup organized the following outreach events:

1. Symposium: Is Democratic Education Possible? Contemporary Challenges and Future Directions at the conference of the Philosophy of Education Society of Great Britain (PESGB), 31.03.2023-02-04.2023 at Oxford University (organized with Anniina Leiviskä, Michael Merry und Natalia Rogach Alexander).
2. Conference "Conflict and Controversy in the Classroom", 22.09.23-23.09.23 at VU Amsterdam (organized with Dorothee Gronostay und Douglas Yacek) [Poster pdf](#)
3. Conference and book launch event for the Cambridge Handbook of Democratic Education (CUP), 08.09.2023 at Centre for Critical Democracy Studies der American University of Paris with Keynotes by Meira Levinson (Harvard), Michael Hand (Birmingham) and Harry Brighouse (Wisconsin-Madison) www.aup.edu
4. Winterschool: "Global Citizenship Education im Zeichen globaler Krisen", 06.02.23-10.02.23 at TU Dortmund (organized with Ruprecht Mattig und Phillip Knobloch)(funded by DAAD; [Poster pdf](#)).

Dr. Cor van Montfort:

- Masterclass Erly Public Academy accountability of interorganisational networks
- 'Philosophy and leadership' course (in collaboration with Overdenkwerk)
- Masterclass 'Good governance, supervision and accountability', Master Educational Leadership, Penta Nova, Zwolle
- Presentation for the Education Inspectorate on inspections of networks
- Presentation Supervision Festival, Three steps towards appropriate supervision in and on organisational networks
- Two-day philosophy course (with Jeroen Flipse), Ethics and justice, ISVW, Leusden
- Presentation for the Inspection Council. Supervision in and on organisational networks.
- Presentation about Good Governance in Secondary Education (VO Council)
- 'Philosophy and leadership' course (in collaboration with Overdenkwerk)

Dr. Anouk Zuurmond:

- Presentation 'Why don't we turn schools into businesses? Philosophical & pedagogical perspectives on marketisation and privatisation', LEARN! seminar 28-02-23
- Presentation & discussion on philosophical perspectives on privatization and vocational education, research group *Education, Culture, Society*, KU Leuven, May 2023
- Paper presentation 'Demystifying science. Simone Weil on 'workers universities'', conference *Philosophy and Theory of Higher Education*, University of Gdansk, Poland, June 2023

Dr. Marjolein Camphuijsen:

- Participation in Advisory Commission on Good Governance (commissioned by the VO-raad)
- Publication of opinion article in national newspaper (Trouw): Camphuijsen, M.K., & Ehren, M. (2023, 25 May). Minister Wiersma luistert niet naar de leraren zelf. [Article on Trouw.nl](#)
- Publication of opinion article in ScienceGuide: Reljveld, L., Moor, M., de., & Camphuijsen, M.K. (2023, 28 November). Hoger onderwijs kan behoefte aan betaalde bijles verminderen. [Article on scienceguide.nl](#)

Dr. Anders Schinkel:

- LIRA grant received to write a Dutch book for a wide audience, based on my work on the educational importance of wonder.
- Kick-off presentation "Climate change as a challenge for education", in ICSEI's research lab "The role of education in climate change", May 17, 2023 [online].
- Participation in Cambridge Handbook of Democratic

Education workshop, Paris, September 8, 2023.

- Presentation "Does education depend on the possibility that the future will be better?", PESGB conference, Oxford, April 1, 2023.
- Presentation "Seeing the person behind a view", at the conference *Conflict and Controversy in the Classroom* (VU Amsterdam 22-23 September, organized by Johannes Drerup).
- Opinion piece "Verantwoordelijk omgaan met mobieltje is voor kinderen te grote opgave" ("Using mobile phone responsibly is too much to ask of children"), in *Trouw*, 3 March 2023.
- Participation in the MiBo Network of the OGO-Vereniging for Developmental Education.
- Participation in ecopedagogy group VU, organized by Karen Verduijn.
- Participation in initiative to create a course on the planetary crisis for all FBM students, with Simone Burger, John van der Kamp, and Koen Lemaire.

Publications (selection):

- Ehren, M.C.M., Hutchinson, J. and Munoz Chereau, B (2023). Place-based Disparities faced by Stuck Schools in England: a Contextual Understanding of Low Performance and the role of Inspection Outcomes. *School Effectiveness and School Improvement* 34:4, 401-418, DOI: 10.1080/09243453.2023.2238698
- 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. *Frontiers in Education*. doi: 10.3389/feduc.2023.1004575
- Ehren, M. (2023). Trust in standardised assessments. *European Journal of Education*, 58(1), 5-10.
- Ehren, M.C.M. (2022). A conceptual framework for trust in standardised assessments: commercial, quasi-market and national systems. *European Journal of Education*, 00, 1-12. [Article on onlinelibrary.wiley.com](#)
- Culp, J., Drerup, J., & Yacek, D. (Eds.). (2023). *The Cambridge Handbook of Democratic Education*. Cambridge University Press.
- Van Montfort and Kenis (2023). *Bouwstenen voor intern toezicht*. In: Governance & Toezicht, themanummer Toezicht op samenwerking, p. 20-27
- Cor van Montfort, Patrick Kenis & Berit Lindemann, 'Paden naar passend toezicht op en in organisatienetwerken', in: Minkman, Janssen et.al., Toezien op samenwerken: naar een verantwoord samenspel. Mediawerf, 2023, p. 128-139
- Cor van Montfort, 'Nabij en onafhankelijk. Over de rol van lokale rekenkamers'. In: NVRR jubileumbundel 20

- jaar, BLKVLD Uitgevers, Zandvoort, 2023, p. 30-45
- Zuurmond, A., Guérin, L., van der Ploeg, P., & van Riet, D. (2023). Learning to question the status quo. *Journal of Vocational Education and Training*.
- Waltman, M., Van Riet, D., Zuurmond, A., Arbon, S., Guérin, L., Van der Ploeg, P. & McKenney, S. (2023). *Samen grip krijgen op kritisch burgerschap. Onderzoeksrapportage onderzoekswerkplaats in het mbo: Democratisering van kritisch denken*. Den Haag: Nationaal Regieorgaan Onderwijsonderzoek.
- Van Riet, D., Waltman, M., Guérin, L., Zuurmond, A. & Martens, L. (2023). *Autonom door kritische burgerschapsvorming in het mbo. Publieksrapportage onderzoekswerkplaats in het mbo: Democratisering van kritisch denken*. Den Haag: Nationaal Regieorgaan Onderwijsonderzoek
- Zuurmond, A. (2023). Thoughtful Labor: Simone Weil on Vocational Education. *Labyrinth. An International Journal for Philosophy, Value Theory and Sociocultural Hermeneutics*, 25(1)
- Camphuijsen, M. K. & Stolp, T. (2023). Private provision of teaching services: Exploring trends and developments in temporary teachers in the Netherlands. *Revista Española de Educación Comparada*, 42, 44-62.
- Camphuijsen, M. K. & Parcerisa, L. (2023). Teachers' beliefs about standardised testing and test-based accountability: Comparing the perceptions and experiences of teachers in Chile and Norway. *European Journal of Education*, 58(1), 67-82.
- Schinkel, A. (2023). Climate change and democratic education. In J. Culp, J. Drerup, and D. Yacek (Eds.), *The Cambridge handbook of democratic education* (pp. 574-593). Cambridge University Press.
- Schinkel, A., L. Wolbert, J.B.W. Pedersen, and D.J. de Ruyter, "Human flourishing, wonder, and education". *Studies in Philosophy and Education* 42(2): 143-162.
- Hebbink, N., D. de Ruyter, and A. Schinkel. "Does dyadic gratitude make sense? The lived experience and conceptual delineation of gratitude in absence of a benefactor". [Article on Journal of Value Inquiry](#).



Melanie Ehren



3.3 Learning Sciences

How can learning processes be optimised in various contexts? The research in Learning Sciences is aimed at facilitating educational improvements with scientific insights in collaboration with practice. Gaining insight into the learning processes at an individual and group level makes it possible to better equip

the instructor with teaching methods and skills that promote the learning of the individual. The aim is to ensure that learning processes are optimised for each individual according to his or her characteristics, in line with the educational context.

3.3.1 Staff

- Professor dr. Martijn Meeter (programme chair; [✉ m.meeter@vu.nl](mailto:m.meeter@vu.nl))
- Professor dr. Maartje Raijmakers (programme chair; [✉ m.e.j.raijmakers@vu.nl](mailto:m.e.j.raijmakers@vu.nl))
- Professor dr. Felienne Hermans
- Professor dr. Chris van Klaveren
- Mariëtte Huizinga (associate professor)
- Anne Fleur Kortekaas-Rijlaarsdam (associate professor)
- Menno van der Schoot (associate professor)
- Hanna Westbroek (associate professor)
- Anne de Bruijn (assistant professor)
- Marjolein Dobber (assistant professor)
- Helene Vos (assistant professor)
- Bregje de Vries (assistant professor)
- Femke van der Wilt (assistant professor)
- Debby ten Hove (assistant professor)
- Judith 't Gilde (assistant professor)
- Melvin Vooren (assistant professor)
- Jan Baan (assistant professor)
- Annelies Brocken (research associate)
- Tom Stolp (research associate)
- Lisa van der Sande (research associate)
- Ralf van Griethuijsen (research associate)
- Sui Lin Goei (visiting fellow)
- Chiel van der Veen (visiting fellow)
- Jos Beishuizen (visiting fellow)
- Cristophe Cauchi (visiting fellow)
- Tirza Bosma (lecturer)
- Cehvy Dorrestein (lecturer)
- Sebastiaan Donszelmann (lecturer)
- Kokkie van Oeveren (lecturer)
- Iris Pauw (lecturer)

PhD students:

- Mirella Jongasma
- Brittney Root
- Eline van Rossum
- Iris Bogaers
- Laurens de Croes
- Willemieke de Jong
- Femke Dijkstra
- Irene Eegdeman
- Peter Langerak
- Li Jiajia
- Adrielli Lopes Rego
- Liu Mei Mei
- Erik Meij
- Koen Ottenhof
- Simone Plak
- Jannetta Prins
- Anni Sapountzi
- Tessa Slim
- Mireille Smits
- Lieke van Stekelenburg
- Nicky de Vries
- Elizabeth Wynberg



Martijn Meeter



Maartje Raijmakers

3.3.2 Research highlights

Project	PI, team and funder	Key questions and findings
Ontwikkelkracht	Cornelisz & van Klaveren, funder OCW	Establishing two theme-specific cocreation research labs aimed at ameliorating language delays and teacher shortages
Lerarenbeurs	Eegdeman, Meeter, van Klaveren; funder NWO	Successful completion of PhD project Eegdeman, with a dissertation on success in vocational education.
Talent grant	N. de Vries; funder FGB	Research stay at Mannheim University, focusing on student-program fit in Higher Ed
GroEIFonds	Kortekaas-Rijlaarsdam; funder: OCW	Funding of a grant focused on professional development of teachers for which Kortekaas-Rijlaarsdam was one of the key writers
Wisselstroom	Huizinga (VU) and Siebrecht (HvA); funder OCW	Funding of a second grant focusing on study guidance of vwo-students in their choice for hbo or wo.
Promising interventions	De Bruijn, van der Wildt, Meeter, funder NRO	Two large-scale RCTs started on interventions aimed at more movement during breaks in primary school, and more talking and language development in kindergarten years.
Understanding Teacher Agenda	B. de Vries, funder NRO	Completion of three year project on the adaptive expertise of educational professionals in continuous educational change



3.3.3 Outreach and capacity-building

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

- Raijmakers & Vos have been running the national research of Weekend van de Wetenschap with various public appearances, including national television and a national newspaper.
- Meeter was featured as an education expert six times in national televised news, and five times in newspapers and once on a radio debate.
- Meeter was asked to contribute an opinion piece on grade retention in the magazine of the national parent association.
- Huizinga was asked to hold a keynote for the LOB-Expertisepunt. She is also active in the OPeRA-network within the theme 'connection' between secondary schools and institutions of higher education around Amsterdam.
- Bregje de Vries and seven other researchers from the national research team of Expeditie Lerarenagenda presented their research findings and their reflections on an innovative research process in a digital magazine filled with short reports, interviews, podcasts and tools.

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

How can we motivate students and professionals to become lifelong learners, particularly in healthcare? Our research group aims to understand how we can develop “students for life” who are intrinsically motivated learners and who constantly interact with their environment, integrate learning and practice, and are dedicated to investing in continuing professional development.

Within our research programme we have two major research lines: a) Motivation and factors associated with motivation (e.g. professional identity, performance, etc.), and b) Inclusion and access. In 2023, our major academic activity was the inaugural lecture of Prof. Rashmi Kusurkar in October and the symposium (entitled “Inclusie in actie”) in honour of the inaugural lecture.

Kusurkar RA. [🔗 The ABC of Inclusion and Motivation.](#) Oration/Inaugural lecture, Vrije Universiteit Amsterdam, 5th October 2023.

3.4.1 Staff

- Prof. Dr. Rashmi Kusurkar (programme chair; [✉ r.kusurkar@amsterdamumc.nl](mailto:r.kusurkar@amsterdamumc.nl))
- Saskia Peerdeman (full professor)
- Dr. Anouk Wouters (Assistant Professor)
- Dr. Anne de la Croix (Assistant Professor)
- Dr. Nourhan Elzafarany (Research Associate)
- Dr. Malou Stoffels (Research Associate)



Rashmi Kusurkar

PhD students:

- Joyce Kors
- Siema Ramdas
- Jettie Vreugdenhil
- Jan Willem Grijpma
- Lianne Mulder
- Lucille (Malan) Crafford - joint PhD student with Sefako Magatho University, South Africa
- Saskia Oosterbaan-Lodder

External PhD students:

Marnix Westein (Utrecht University), Yuanyuan Zhu (University of Maastricht), Adam Gavarkos (IHPME, University of Toronto, Canada), Joram Pach (Vrije Universiteit, Amsterdam), Sven Schaepkens (Erasmus University Medical Centre), Femke Dijkstra (Vrije Universiteit, Amsterdam), Kate McCarthy (University College London), Carolyn Teuwen (NWZ Alkmaar), Brigitha Nuijens-Veeger (University of Amsterdam)

Research Assistant:

Louti Broeksma

3.4.2 Research highlights

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 Kusurkar (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), Nourhan Elzafarany (Amsterdam UMC), Zakia Essanhaji (Vrije Universiteit), Allaa Elbelassy (Radboud UMC). 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 interdisciplinarity. It creates understanding of the patient journey, knowledge of care networks, awareness of a career outside the hospital, and empathy in communication.

<p>Diversity in the pathway from medical student to specialist in the Netherlands: a retrospective cohort study.</p>		<p>Medical specialist workforces are not representative of the society they serve, partially due to loss of diversity in the path from student to specialist. Using a retrospective cohort design, we investigated which demographic characteristics of bachelor students of medicine are associated with becoming a physician or medical specialist. We found that female students had higher odds of becoming a physician. Students with migration background other than Turkish, Moroccan, Surinamese, Dutch Caribbean or Indonesian had lower odds of becoming a specialist. Nationwide, physicians with a Turkish or Moroccan migration background, and female physicians with other migration backgrounds, are least likely to be a medical specialist. In light of equity in healthcare systems, we recommend that every recruitment body increases the representativeness of their particular specialist workforce.</p>	<p>Understanding of healthcare professionals towards the roles and competencies of clinical pharmacists in South Africa.</p>	<p>Crafford L, Kusurkar RA, Bronkhorst E, Gous AGS, Wouters A. BMC Health Services Research 2023; 23: 290.</p>	<p>Incorporating clinical pharmacists in collaborative medical teams results in better patient treatment and health outcomes. In addition, the understanding of other healthcare professionals (HCPs) towards the role of clinical pharmacists can either facilitate or hinder the implementation and expansion of these services. The main distinction between pharmacists and clinical pharmacists lie in their different scope of duties. This study set out to explore other HCPs' understanding towards the role of the clinical pharmacists in South Africa, and to identify associated factors. An exploratory, survey-based, quantitative study was conducted. The findings highlighted the possible impact of role expectations and lack of understanding among HCPs. A standard job description with recognition from statutory bodies could promote other HCPs, as well as clinical pharmacists' understanding of their roles. Findings further suggested the need for interventions like interprofessional education opportunities, staff induction programmes and regular interprofessional meetings to foster acknowledgement of clinical pharmacy services, promoting the acceptance and growth of the profession.</p>
<p>The effect of assessments on student motivation in Health Professions Education: A review. Acad Med. 2023;98:1083–1092.</p>	<p>Kusurkar RA, Orsini C, Somra S, Artino AR, Daelmans HEM, Schoonmade L, van der Vleuten CPM.</p>	<p>In health professions education (HPE), the effect of assessments on student motivation for learning and its consequences have been largely neglected. This is problematic because assessments can hamper motivation and psychological well-being. The research questions guiding this review were: How do assessments affect student motivation for learning in HPE? What outcomes does this lead to in which contexts?</p> <p>The findings indicate that students strategically learned what was expected to appear in assessments at the expense of what was needed in practice. Therefore, health professions educators should rethink their assessment philosophy and practices and introduce assessments that are relevant to professional practice and stimulate genuine interest in the content.</p>	<p>Optimizing school-supported clinical learning: an investigation in the context of nursing education. [PhD-Thesis - Research and graduation internal, Vrije Universiteit Amsterdam]. Article on research.vu.nl</p>	<p>Stoffels, M.</p>	<p>Optimizing school-supported clinical learning: an investigation in the context of nursing education. The integration of school and practice learning in health professions education (HPE) is important for students' development of conceptual knowledge and their transfer of learning across settings. Moreover, aligning expectations across different learning contexts can help design training trajectories that are both effective and accountable to society. This thesis aimed to investigate these opportunities and threats and their underlying mechanisms in the context of nursing education, and to integrate these into a model that can be used for future studies on "school-supported clinical learning".</p> <p>We concluded that school-supported clinical learning can help students to learn beyond the tasks that patient care dictates, to compare and contrast different experiences and to gain a deeper understanding of the profession and of patient care. This requires a move away from assessment-driven, individualized learning with detailed criteria. Instead it requires a mutual agreement between school and practice on the desirable outcomes of clinical education. Collaborations should focus on facilitating staff and students to achieve these outcomes in a way that suits each clinical ward and supports individual students, and on providing tools and aids that can be used around patient care.</p>
<p>Reasoning like a doctor or like a nurse? An systematic integrative review. Frontiers in Medicine 2023; 10: 1017783.</p>	<p>Vreugdenhil J, Somra S, Ket H, Custers EJFM, Reinders M, Dobber J, Kusurkar RA.</p>	<p>When physicians and nurses are looking at the same patient, they may not see the same picture. If assuming that the clinical reasoning of both professions is alike and ignoring possible differences, aspects essential for care can be overlooked. We aimed to identify, compare and contrast the documented features of clinical reasoning of physicians and nurses through the lens of layered analysis and to conduct a simultaneous concept analysis. We observed four principle contrasts: a broad or narrow focus, consideration of the patient as such or of the patient and his relatives, hypotheses to explain or to understand, and argumentation based on causality or association. This review can be used as a first step toward gaining a better understanding and collaboration in patient care, education and research across the nursing and medical professions.</p>			

Flagship project

Kusurkar RA, Mulder L, Fikrat-Wevers S, Croiset G, Groenier M, Koster AS, Miedema H, Ravensloot JH, van den Broek WW, van Gestel R, Woltman AM, Wouters A. Onbedoelde effecten van selectie op de diversiteit van de geneeskundestudenten populatie en de kandidatenpool: Wat kunnen we eraan doen? [PDF on nro.nl](#).

In 2023 we completed our flagship research project funded by NRO consortium grant entitled “**Unintended effects of selection on medical student and applicant diversity: What can we do about this?**”. This consortium comprised members from Erasmus MC, UMC Groningen, Universiteit Twente, Universiteit Utrecht 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 and physicians, opportunity inequality in selection, and support for policies to address this opportunity 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. Boys, candidates without parents with a BIG-registered profession, candidates with a Turkish, Moroccan, Surinamese or Caribbean-Dutch migration background, and candidates whose parents do not belong to the most affluent 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 mock study 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.



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

The results show that the representativeness of students from selective higher education programs is limited. One of the reasons is self-selection. The candidates who apply are often not representative of the admissible groups within the age cohort, mainly in the case of gender: males are underrepresented in the candidate pools of almost every program cluster, especially when it comes to health care programs. However, self-selection is not the only reason for the underrepresentation of different groups. Widespread opportunity inequality in selection contributes to the lack of representativeness of student populations in higher education.

Further along the medical education pathway, intersectional analyses showed that male physicians with no migration background were more likely to be current specialists than all other groups of physicians on the 2021 BIG register. The physicians with the lowest probability of being specialists were female physicians with Turkish or Moroccan migration backgrounds. At the same time, the studies suggest that reintroducing 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 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 opportunity inequality found is not reflected in candidates’ perceptions of different selection methods; these were similar for subgroups of candidates. Candidates did worry about equal opportunity in a 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 status holders; and Bonded Medical Places for candidates from

the Dutch Caribbean, who thereby pledge to provide care in the Dutch Caribbean for a number of years after graduation in exchange for guaranteed admission. Regarding the values that candidates felt should underlie a good selection process, values emerged in the areas of the goals of selection, the content of selection and the treatment of candidates. Relevant in the context of diversity, candidates believed that selection should aim to select a diverse student population to meet the needs of a diverse society. In addition, candidates made several proposals to promote diversity. Some recommendations were made from an equity perspective, such as promoting equal access to information, establishing a compensatory system and developing procedures in which outside help has less influence. Other recommendations were more equity-related, such as contextualized admissions and drawing lots with extra tickets for underrepresented groups. By equity, we mean measures and procedures that promote equity and representativeness.

The following publications resulted from this project:

- Mulder L, Wouters A, Fikrat-Wevers S, et al. Influence of social networks in healthcare on preparation for selection procedures of health professions education: a Dutch interview study. *BMJ Open* 2022;12:e062474. Mulder L, Wouters A, Twisk JWR, et al. Selection for health professions education leads to increased inequality of opportunity and decreased student diversity in The Netherlands, but lottery is no solution: A retrospective multi-cohort study. *Med Teach*. 2022;44(7):790-799.
- Mulder L, Wouters A, Somra S, et al. Investigating the Support for Equitable Admissions Policies in Health Professions Education: the Formal Consensus Method. (Under Revision).
- Mulder L, Twisk JWR, Koster AS, Akwiwu EU, Ravesloot JH, Croiset G, Kusrkar RA, Wouters A. Inequality of opportunity in selection procedures limits diversity in higher education: An intersectional study of Dutch selective higher education programs. *PLoS ONE* 18(10):e0292805.
- Mulder L, Wouters A, Akwiwu EU, Koster AS, Ravesloot JH, Peerdeman SM, Salih M, Croiset G, Kusrkar RA. Diversity in the pathway from medical student to specialist in the Netherlands: a retrospective cohort study. *The Lancet Regional Health – Europe* 2023; 35:100749.
- Fikrat-Wevers S, Stegers-Jager KM, Afonso PM, et al. Selection tools and student diversity in health professions education: a multi-site study. *Advances in Health Sciences Education* 2023, Early Online. [Article on springer.com](#)
- Fikrat-Wevers S, Stegers-Jager K, Groenier M, et al. Applicant perceptions of selection methods for health professions education: Rationales and subgroup differences. *Medical Education* 2022, Early Online. [Article on asmepublications.onlinelibrary.wiley.com](#)
- Fikrat-Wevers S, Stegers-Jager KM, Mulder LMA, Cheung J, Van Den Broek WW, Woltman AM. Values underlying selection into health professions education: the applicant perspective. (Submitted).

This project has received major attention from the Media. Our project team has been interviewed or our work has been cited in several newspapers and magazines (NRC, Trouw, 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. The two PhD students have given several presentations to different stakeholders. Lianne Mulder has given >60 presentations to stakeholders related to policy making (such as the Ministry of Education, Science and Culture, Inspectorate of Higher Education) and participated in a discussion on provision of equitable healthcare by invitation in the House of Commons (De Tweede Kamer) for and was interviewed in a programme on Radio 1.

Lianne Mulder has been nominated for the Vrouwen in de Media award 2024 from Flevoland.

Symposia and presentations organised from this project and are available online:

1. Symposium - Glazen drempels - Het doorbreken van (on)zichtbare barrières in selectief onderwijs. Virtueel symposium georganiseerd door Onderzoek van onderwijs, Amsterdam UMC locatie Vrije Universiteit Amsterdam. 16 mei 2023. [View on YouTube](#)
2. Presentations (Lianne Mulder):
 - [Onderwijsfestival 2023 van het O-Netwerk Vrouw-Kindcentrum met thema "Inclusief onderwijs". \(youtube.com\)](#)
 - [Over het IMS congres 2022 – Interfacultair Medisch Studentoverleg](#)
 - [Ongelijkheid en onderwijs. Hoe pakken we kansenongelijkheid in het onderwijs aan? - SPU125](#)
 - [Extended Congres 2021 NVMO](#)
 - <https://www.advance-he.ac.uk/programmes-events/conferences/equality-diversity-and-inclusion-conference-2022>
 - <https://www.sigra.nl/terugblik-conferentie-diversiteit-en-inclusie-en-uitreiking-diversiteitsaward-video>
 - <https://www.youtube.com/watch?v=m01oWkm5VFY>
 - [LEARN! Diversity Day Seminar - Lianne Mulder - YouTube](#)
 - [CoMaster Webinar - Diversiteit en Kansenongelijkheid in Selectieprocedures voor Medische Opleidingen - YouTube](#)
 - [hops://youtu.be/hvr1F2CgHiw](https://youtu.be/hvr1F2CgHiw)

3.4.3 Outreach and capacity-building

- Chairwoman of NVMO (Netherlands Association of Medical Education) / November 2023 onwards – Rashmi Kusrkar
- Member of the Executive Committee of the Association of Medical Education in Europe (AMEE) – Rashmi Kusrkar
- Member of the Fellowship Committee of the Association of Medical Education in Europe (AMEE) – Rashmi Kusrkar
- Member of the Scientific Committee (WeCo) of the Netherlands Association for Medical Education (NVMO) – Anouk Wouters
- Appointment as Faculty - Status Only, Institute of Health Policy, Management and Evaluation, University of Toronto, Canada - Rashmi Kusrkar
- Appointment as Honorary Lecturer – University College London (UCL), UK – Anouk Wouters
- Chair of "Fringe" sessions at Association of Medical Education in Europe (AMEE) Conferences – Anne de la Croix
- Associate Editor, *Perspectives on Medical Education* – Rashmi Kusrkar
- Associate Editor on Equity, Diversity, Inclusion, *Medical Teacher* – Rashmi Kusrkar
- 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 >60 presentations to stakeholders related to policy making (such as the Ministry of Education, Science and Culture, Inspectorate of Higher Education). This project has received major attention from the Media. Her work was cited in several newspapers and magazines (NRC, Trouw, 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 gave a Keynote entitled, "Behind the scenes of qualitative research" for ASME Education Research Committee's Researching Medical Education (RME) conference, London in Nov 2023.
- We organized a symposium on, "Inclusion in action", at the occasion of the inaugural lecture of Rashmi Kusrkar, which was attended by around 150 participants.





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

3.5 Child rearing

The programme Child Rearing focuses on parenting, attachment, and self-determination in family settings. The main question we aim to answer is how parents, teachers, and other formal and informal educators can help children find their place within society and become the persons they want to be. Broadly speaking, parents and educators provide control and protection, guidance of children's learning, entry within peer groups, and a nurturing family and school climate.

This program views socialization, character building, and child rearing through the lens of socioemotional development. One line of work under this theme focuses on parenting, attachment, and self-determination in family settings. Another focuses on nurturing social relationships in formal educational and care settings.

3.5.1 Staff

- Carlo Schuengel (program chair; c.schuengel@vu.nl)
- Paula Sterkenburg (professor on special appointment)
- Mirjam Oosterman (associate professor)
- Agnes Willemen (associate professor)
- Marije Verhage (associate professor)
- Ina Koning (associate professor)
- Clasien de Schipper (assistant professor)
- Lianne Bakkum (assistant professor)
- Anne Tharner (assistant professor)
- Aline Honingh (assistant professor)
- Caroline Jonkman (assistant professor)
- Suzanne Derks (research associate)
- Mathilde Overbeek (research associate)
- Eirini Pappa (research associate)
- Manon Smit (research associate)
- Stefania Vacaru (research associate)
- Marieke Werkman (research associate)
- Eline Heppe (visiting fellow)
- Marleen de Moor (visiting fellow)

- Linda Douma (visiting fellow)
- Madelon Hendricx-Riem (visiting fellow)
- Or Dagan (visiting fellow)
- Marjoke Rietveld-van Wingerden (visiting fellow)
- Mirte Forrer (visiting fellow)
- Marjolein Vandenbosch (visiting fellow)
- Simone van der Plas (visiting fellow)
- Sien Vandesande (visiting fellow)
- Pol van Lier (visiting fellow)

PhD students:

- Jessica Braakman
- Nathalie Patty
- Tanja Doodeman
- Valerie Fictorie
- Helen Korving
- Jacqueline van Tuyl van Serooskerken
- Debora van Elst
- Kim Starreveld
- Yvonne Kruithof
- Esther Bisschops (External PhD Candidate)
- Marja Eding (External PhD Candidate)
- Bianca Polman-Meddeler (External PhD Candidate)
- Bas Tierolf (External PhD Candidate)
- Jolanda Westera (External PhD Candidate)
- Ruud Wong Chung (External PhD Candidate)
- Mirjam Wouda (External PhD Candidate)



Carlo Schuengel

3.5.2 Research highlights

Parenting, attachment, and self-determination in family settings

Project	PI, project years and funder	Key questions and findings (PhDs)
Network for self-determination of people with disabilities and intensive care needs (Netwerk Samen Kunnen Kiezen)	Carlo Schuengel & Petri Embregts, 2016-2023, ZonMw NPG	<ul style="list-style-type: none"> - Various initiatives are taken to improve access and equity with regard to research for people with intellectual disability and data collected for care and research. - Basic psychological needs satisfaction can be assessed among people with mild intellectual disability and through the perspective of family members of serious multiple and intellectual disabilities, - Longitudinal findings on changes in basic psychological needs are forthcoming.
Consortium for Attachment Research Synthesis	Marije Verhage & Carlo Schuengel, 2015-, internal funding	The goal of the consortium is to better understand fundamental questions in attachment through individual participant data meta-analysis. Under the umbrella of CARS, multiple IPD meta-analysis initiatives have been taken which are supported through our data commons infrastructure and our expertise regarding methodological and regulatory issues.
Assessing parental sensitivity in child welfare practice	Mirjam Oosterman & Carlo Schuengel, 2018-2023, 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 professionals can strike a proper balance in sharing or withholding from parents concrete details of sexual abuse committed against their children. Findings have been disseminated as vlog, podcast, leaflet, and webinar to support professionals.
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).
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
Parenting and online behaviour of children	Koning, Tharner, & Oosterman, 2023-2027, ZonMw Academische Werkplaatsen	This project aims to elucidate digital media use of children, the role of parents and the parent-child relationships, and the role of neurodivergence. In particular, the project aims to uncover how parents can support their children with digital media, reducing risks but especially benefiting from the opportunities it provides for increased social participation by neurodivergent youth.

Nurturing social relationships in formal educational and care settings

Project	PI, project years and funder	Key questions and findings (PhDs)
Social relationships and ICT: Fostering coping, autonomy, and wellbeing (Sociale relaties en ICT: bevorderen van coping, autonomie en welzijn)	Paula Sterkenburg, 2016-2023, 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, 2016-2023, 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 behaviour (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) multidisciplinary 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 2023 focused on insights from tacit and experiential knowledge and on effects of implementing the new Care & Coercion law on involuntary care registrations.
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 behaviour (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
Testing Social Information Processing with (young) adults with a mild intellectual disability	Maaïke van Rest, 2023-2025, SWO	Development and testing of psychometric properties of an adult version of the SIVT that was developed and tested for youth with mild intellectual disability.
Guideline development on assessment and treatment of trauma for people with intellectual disability	Smit, 2023-2025, ZonMw NPG, ZonMw Academische Werkplaatsen	A survey among professionals has shown important areas of divergence and confusion in practice, related to a dearth of evidence-based assessment tools and interventions.
Growing up in a nurturing environment	Ina Koning, 2023-2027, VWS	Evaluation of a community-based intervention targeting substance use and mental health in the Netherlands

Flagship projects: Academic Collaborative Centres

The child-rearing program has developed over the years long-term committed collaborations with organisations in the field of care for children and adults with intellectual and visual disabilities and youth care. These collaborations have been modelled as Academic Collaborative Centres ('academische werkplaatsen' in Dutch), which means that programming of research takes place through open dialogue between researchers, practitioners, and other stakeholders, such as clients and families. These academic collaborative centres provide an infrastructure to lower the threshold for partners from practice to initiate collaborative research projects and to lower the threshold for researchers to explore their scientific question with practice. Furthermore, these centres offer a primary way to jointly disseminate research and facilitate implementation. Two centres receive structural funding (€875k each per year) for their operations through ZonMw, providing a sound financial basis to develop the infrastructure, expertise, conduct pump-priming projects, and cofinance projects. These are [Viveon](#), the Academic collaborative centre of 's Heeren Loo and VU, and the Academic Collaborative Centre [Social relationships and attachment](#), which includes care organizations Bartiméus, Ons Tweede Thuis, Jij & Ik, and Odion. Two other centres depend still on project funding and in-kind contributions. These are the long-standing collaboration with Kenter youth care within the Academic Collaborative Centre [Child Abuse](#) and the more recent Academic Collaborative Centre for [Infant Mental Health](#). These long-term collaborations are of great strategic importance to be able to conduct research that is both of scientific as well as societal relevance.

3.5.3 Outreach and capacity-building (selected)

- Initiatives to clarify attachment-related terminology led to a widely read editorial perspective led by members of the program (Verhage, Tharner et al., 2023) in the Journal of Child Psychology and Psychiatry, garnering an altmetric score of 346. Explanation of terminology has been published on the website of the Society for Emotion and Attachment Studies ([link](#)) and has appeared in Dutch.
- Or Dagan and Carlo Schuengel wrote a piece for The Conversation on how secure attachment to both parents, not just mothers, may boost children's development ([link](#)). This website has a broad international reach for popularizing science. The article has thus far garnered 37,247 reads and led to further comment on CNN.com ([link](#)).
- Ina Koning published an opinion piece to argue for government regulation to curb social media addiction among youth, based on their research on this issue ([link](#)). The piece garnered broad media attention, including the launch of the term 'screenwashing' to

describe the manoeuvres of media and technology companies to hold off legislative interventions by implementing performative measures of their own.

- Ina Koning published guidance for policy for digital media use by youth, laying out in accessible language what parents and professionals can do to foster security for children in a digital environment and what governments can do to support this ([link](#)).

3.6 Collaborative flagship projects across our research programs

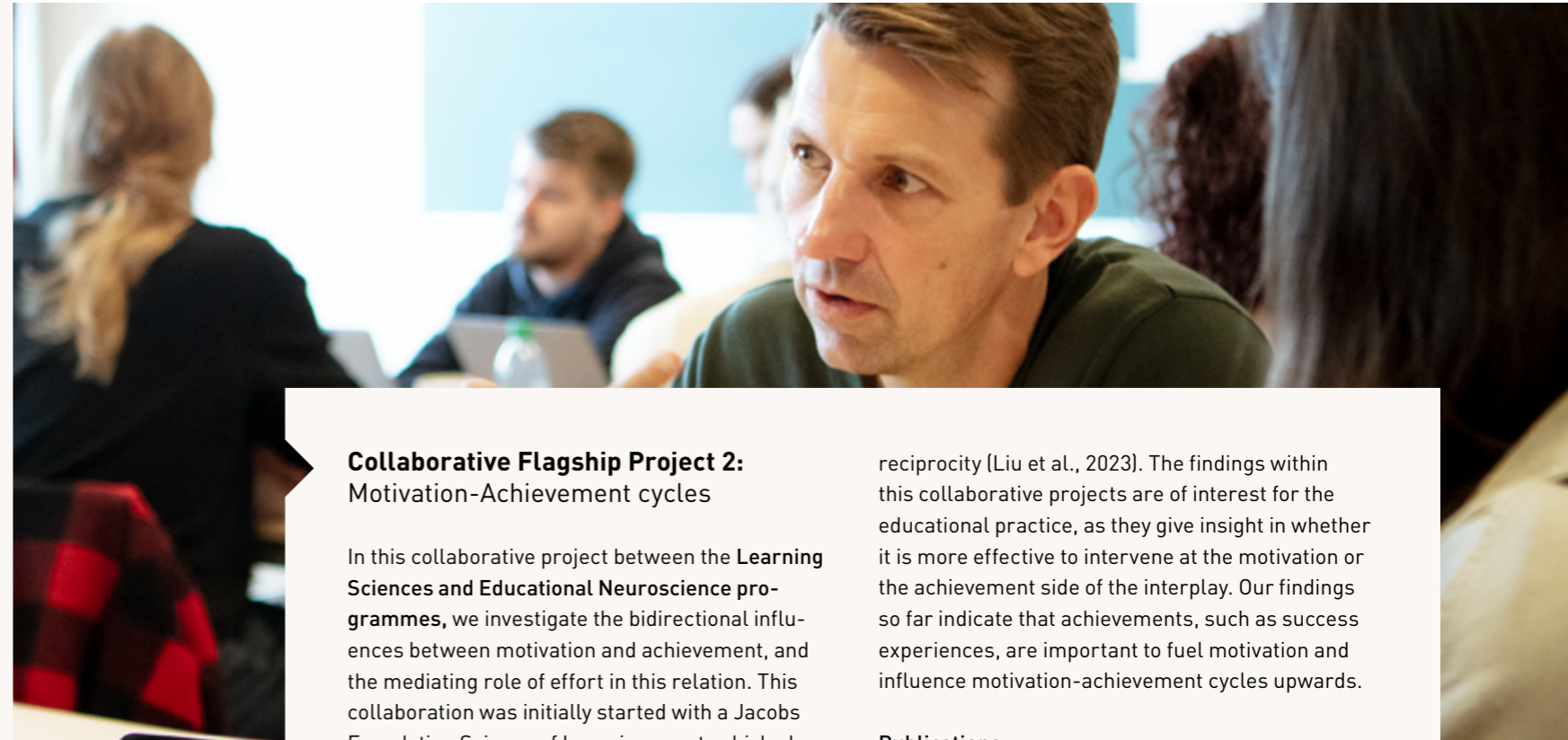
Collaborative Flagship Project 1: Small-group active learning in medical education

Jan Willem Grijpma's PhD project (provisional title: Optimizing medical students' engagement in small-group active learning), in its last year in 2023, was a **collaboration between the Learning Sciences programme and the Motivation for life-long learning in the health professions program**. In his thesis, he delved into the critical issue of student engagement in active learning within the realm of medical education. His central research question was how to support medical teachers in implementing small-group active learning into their teaching practices to optimise student engagement. To this end, he conducted five empirical studies, of which three have been published in high-impact medical education journals and one is now being considered by a journal. The first four aimed to gain an in-depth understanding of students' appreciation of small group active learning and their engagement in small group active learning, while the fifth aimed to apply that knowledge

to improve teacher professional development for implementing small group active learning through design-based research. He will graduate in 2024.

Publications:

- Grijpma, J. W., de la Croix, A., Kleinveld, J. H., Meeter, M., & Kusurkar, R. A. (2021). Appreciating small-group active learning: What do medical students want, and why? A Q-methodology study. *Medical Teacher*, 43(4), 411-420. [Article on tandfonline.com](#)
- Grijpma, J. W., de la Croix, A., Meeter, M., & Kusurkar, R. A. (2022). Changes in student appreciation of small-group active learning: A follow-up q-methodological study. *International Journal of Educational Research Open*, 3, 100199. [Article on sciencedirect.com](#)
- Grijpma, J. W., Mak- van der Vossen, M., Kusurkar, R. A., Meeter, M., & de la Croix, A. (2022). Medical student engagement in small-group active learning: A stimulated recall study. *Medical Education*, 56(4), 432-443. [Article on ASME](#)



Collaborative Flagship Project 2: Motivation-Achievement cycles

In this collaborative project between the **Learning Sciences and Educational Neuroscience programmes**, we investigate the bidirectional influences between motivation and achievement, and the mediating role of effort in this relation. This collaboration was initially started with a Jacobs Foundation Science of Learning grant, which also included partners at the University of Amsterdam and Berkeley (USA). It is now being continued with co-supervising a PhD student on a CSC fellowship. The project started with an expert meeting that resulted in a collaborative theoretical paper, in which we synthesize across all different motivation theories how they conceptualize the bidirectional influence between motivation components, learning behaviours, and (perceived) achievement (Vu et al., 2021). In this paper, we also put forward a research agenda for the field to move forward. In addition, a meta-analysis of 47 longitudinal studies on the reciprocity between various motivation constructs and academic achievement was recently published. Key findings were that the effect of achievement on motivation was nearly twice as strong, and that the effect of motivation on achievement was only found for self-belief motivation constructs such as academic self-concept. Another recent publication showed the importance of selecting the most optimal statistical model to analyse motivation-achievement

reciprocity (Liu et al., 2023). The findings within this collaborative projects are of interest for the educational practice, as they give insight in whether it is more effective to intervene at the motivation or the achievement side of the interplay. Our findings so far indicate that achievements, such as success experiences, are important to fuel motivation and influence motivation-achievement cycles upwards.

Publications:

- Liu, M., Vu, T., van Atteveldt, N., & Meeter, M. (2023). Testing the reciprocal effect between value of education, time investment, and academic achievement in a large non-Western sample. *Journal of Intelligence*, 11(7), 133. [Article on mdpi.com](#)
- Vu, T., Magis-Weinberg, L., Jansen, B. R., van Atteveldt, N., Janssen, T. W., Lee, N. C., van der Maas, H.L.J., Raijmakers, M.E.J., Sachisthal, M.S.M., & Meeter, M. (2022). Motivation-achievement cycles in learning: A literature review and research agenda. *Educational Psychology Review*, 34(1), 39-71. [Article on springer.com](#)
- Vu, T., Scharmer, A.L., van Triest, E., van Atteveldt, N. & Meeter, M. (2024). The reciprocity between various motivation constructs and academic achievement: a systematic review and multilevel meta-analysis of longitudinal studies. *Educational Psychology*, DOI: 10.1080/01443410.2024.2307960

4. Event and seminars in 2023

Date	Event
27 January	Seminar with Sam Abrams: The Intellectual Foundations of School Choice and Contemporary Implications
13 February	PhD lunch hosted by Carlo Schuengel
28 February	Seminar with Anouk Zuurmond: "Why don't we turn schools into businesses?"
14 March	Introductory meeting
16 March	Seminar with Anantha K. Duraiappah and Nienke van Atteveldt: Reimagining Education: Key findings & recommendations from the ISEEA report
21 March	Seminar with Astrid Ottenheim: Perspective-taking by teachers in coping with disruptive class room behaviour
3 April	Seminar with Herman van de Werfhorst: Social and academic embeddedness as buffers against school closure effects
19 April	Seminar with Neha Miglani: Pedagogies of well-being: Unpacking Social Emotional Learning in practice
16 May	PhD lunch hosted by Martijn Meeter
23 May	Seminar with Sui Lin Goei: Augmented Reality to promote self-management skills via behavioural lessons within the framework of Positive Behaviour Interventions & Support
21 June	Seminar with Tore Bernt Sorensen: A European Experiment in Governing Teacher Training
13 September	PhD lunch hosted by Nienke van Atteveldt
17 October	Seminar with Pieter Verstraete: Towards an acoustic approach of our educational pasts
14 December	PhD lunch hosted by Rashmi Kusurkar
19 December	Seminar with Zeijan Feng: Automated coding of Strange Situation Procedures using computer vision and machine learning- Research

On November 2nd with hosted the **Annual LEARN! Conference** in collaboration with the EducationLab:

The theme of this year's conference was to address the effectiveness of educational policy interventions to improve education.

Keynote by Claire Shewbridge: New professionalism and Future of Teaching

Keynote by David Godfrey: Building Organisational Resilience through school partnerships and peer learning

Parallel sessions with:

May Liu: "Exploring freshmen's motivation trajectory at the start of higher education"

Irene Eegdeman: "Relating Students' Motivation Trajectories in the First ten Weeks of their Vocational Education Program to the Decision to Persist"

Tieme Janssen: "Learning about and improving student motivation in the bachelor Psychology: overview of SKO trajectory"

Van Vu: "The reciprocal relationship between motivation and academic achievement: Is the magic there?"

Tijana Breuer: "Selection in ITE-programs: Do study and

labour market outcomes change after the introduction of cognitive skills tests?"

Stan Vermeulen: "Effects of School Accountability: A regression discontinuity design"

Ina Koning: "What do we (not) know about parenting and (problematic) social media use?"

Ihsane Bouaouida: "The role of parents in digital media use among neurodivergent youth: How to answer important questions for parenting?"

Didier Fouarge: "Behavioural effects of providing labour market information to students"

Elke Claes: "Primary school skill development: from first- to sixth-grade"

Melline Somers: "The Effectiveness of Interventions to Increase Employment in Education and Healthcare: A Systematic Literature Review"

Tom Stolp: "Two studies on teacher employment in the Netherlands" **Marjolein Camphuijsen:** "The self-employed teacher: Exploring motivations, experiences and professional identities"

Dimitris Pavlopoulos & Stef Bouwhuis: "Why do Dutch employers use flexible contracts and how do their motives affect the careers of employees working with flexible contracts?"

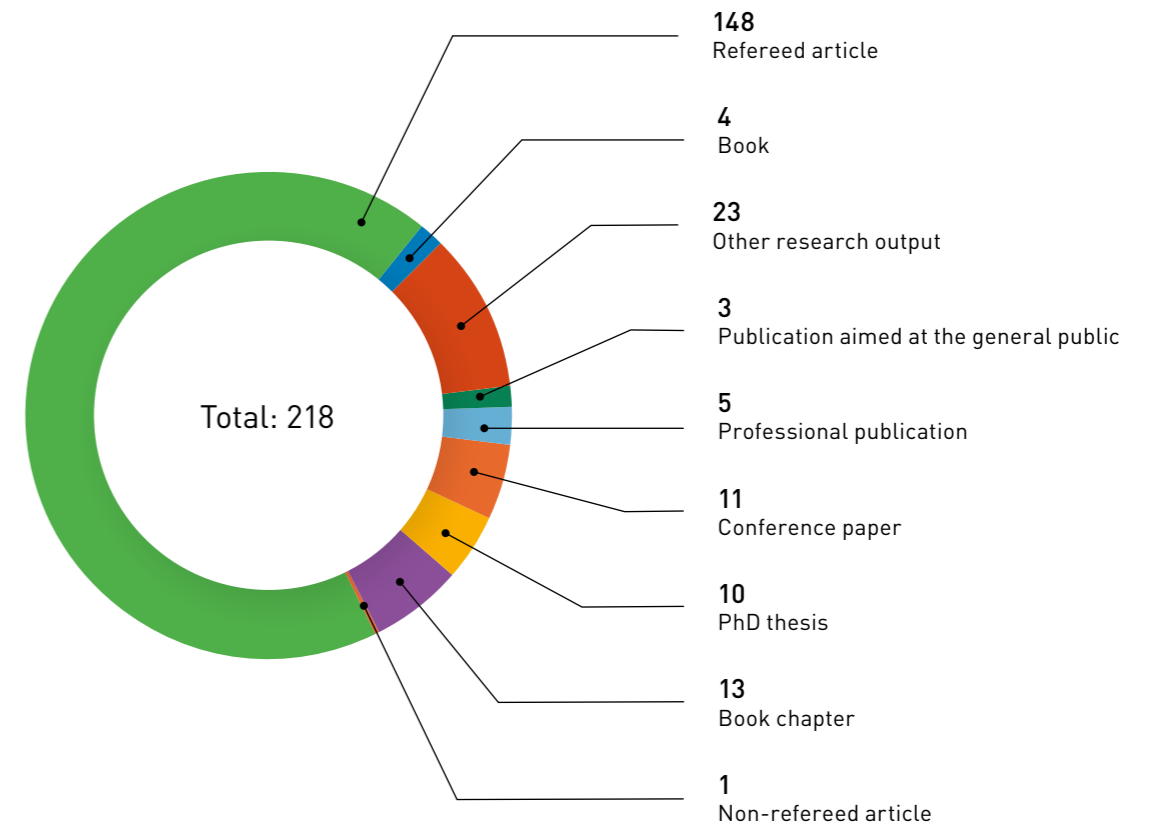
Closing Panel with Inge de Wolf and Melanie Ehren: "Towards an evidence-informed education system in the Netherlands"



The 2023 annual conference addressed the effectiveness of educational policy interventions to improve education.

5. Facts and figures

5.1 research output



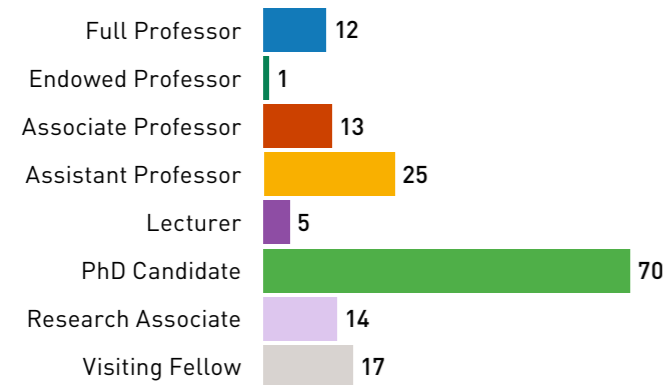
A word cloud from the titles of all our publications shows that children and education are at the heart of our research.



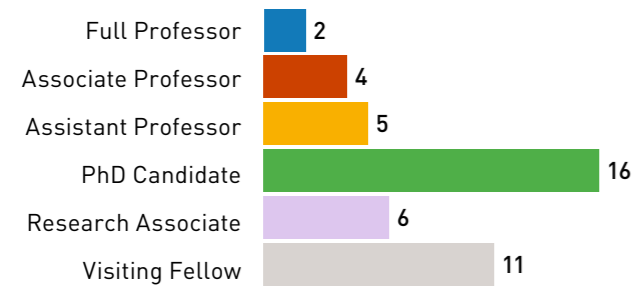
5.2 Research staff

The staff we have in our institute are presented below according to academic role in each of the programmes. The institute has a total of 157 staff ranging from 70 PhD candidates to 12 full professors, showing the diversity in staff in terms of seniority of roles. The largest programmes of work are in Child Rearing and Learning Sciences.

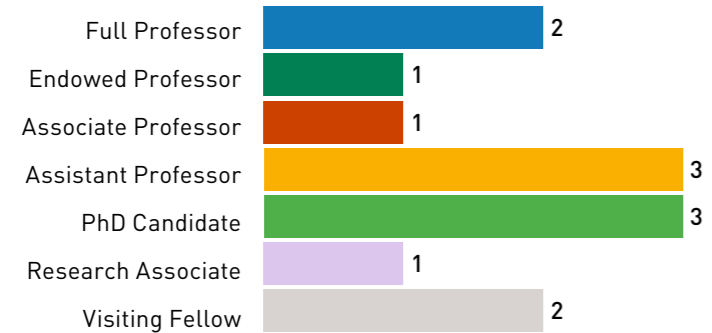
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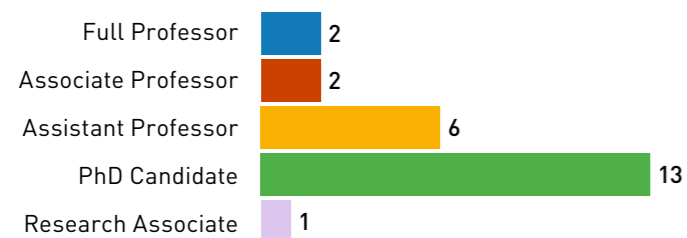
LEARN! - Child Rearing



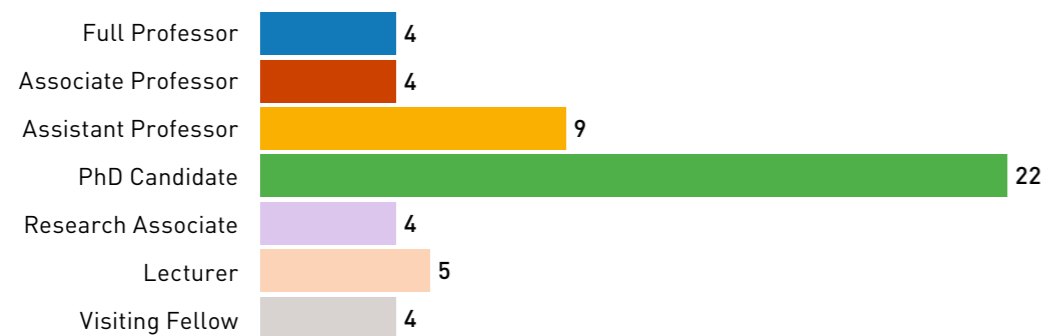
LEARN! - Educational governance, identity and diversity



LEARN! – Educational Neuroscience, Learning and Development



LEARN! – Learning Sciences



LEARN! – Motivation for Life long learning



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Photography

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