

Innovation and Research with Children and Young People: Methods and Practices

International Summer School of Zhejiang University

27th June ~ 11th July, 2022

School of Education, Zhejiang University



NIRC
Network for Innovation and Research
with Children and Young People



Programme Chair

Junqing Zhai, Associate Professor, School of Education, Zhejiang University, China

Guest Speakers

Alexandros Amprazis, Assistant Professor, University of Western Macedonia, Greece

Ye Cao, PhD Candidate & Research Assistant, King's College London, UK

Constadina Charalambous, Assistant Professor, European University Cyprus, Cyprus

Justin Dillon, Professor, University of Exeter, UK

Jie Gao, Research Fellow, University College of London, UK

Shirin Hine, PhD Candidate & Research Assistant, King's College London, UK

Kate Hoskins, Reader, Brunel University London, UK

Agnieszka Ewa Krautz, Postdoctoral Researcher, Universität Mannheim, Germany

Holli-Anne Passmore, Assistant Professor, Concordia University of Edmonton, Canada

Serkan Uçan, Assistant Professor, Istanbul Medeniyet University, Türkiye

Jo van Herwegen, Associate Professor, University College London, UK

Yuwei Xu, Assistant Professor, University of Nottingham, UK

Tingting Yuan, Assistant Professor, University of Nottingham, UK

Scheduled Programmes

June 2022

Monday	Tuesday	Wednesday	Thursday			
27	28	29	30			
Serkan Ucan (13:50-14:50) Justin Dillon (16:00-17:00)	Alexandros Amprazis (15:20-16:20) Shirin Hine (16:30-17:30)					

July 2022

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
				1	2	3
				Holli-Anne Passmore (10:00-11:30) Jie Gao & Yuwei Xu (15:00-16:00) Kate Hoskins (16:00-17:00)		
4	5	6	7	8	9	10
Constadina Charalambous (14:00-15:00) Tingting Yuan (16:00-17:00)				Agnieszka Krautz (15:00-16:00) Cathrine Ye Cao (16:15-17:15)		
11						
Jo van Herwegen (16:00-17:00)						

Session 1 | 27th June, 13:50-14:50 (8:50-9:50 @ Istanbul)

How can we promote dialogic interactions in primary school classrooms?

Serkan Uçan (Istanbul Medeniyet University, Turkey)

Session 2 | 27th June, 16:00-17:00 (9:00-10:00 @ London)

Teaching and learning about climate change, environment and health

Justin Dillon (University of Exeter, UK)

Session 3 | 28th June, 15:20-16:20 (10:20-11:20 @ Athens)

Plant blindness and children's recognition of plants as living things

Alexandros Amprazis (University of Western Macedonia, Greece)

Session 4 | 28th June, 16:30-17:30 (9:30-10:30 @ London)

The potential of Forest School practice in England to support gender equity – and why this matters for Environmental Education

Shirin Hine (King's College London, UK)

Session 5 | 1st July, 10:00-11:30 (30th June, 20:00-21:30 @ Edmonton)

Nature-based wellbeing interventions: Simple, yet powerful

Holli-Anne Passmore (Concordia University of Edmonton, Canada)

Session 6 | 1st July, 15:00--16:00 (8:00-9:00 @ London)

Understanding young children's perspectives on and experiences of COVID-19 in China and England

Jie Gao & Yuwei Xu (UCL & University of Nottingham, UK)

Session 7 | 1st July, 16:00-17:00 (9:00-10:00 @ London)

Me, my child and Covid-19: parents' reflections on their child's experiences of lockdown in the UK and China

Kate Hoskins (Brunel University London, UK)

Session 8 | 4th July, 14:00-15:00 (09:00-10:00 @ Nicosia)

Translanguaging, social justice and 'conflicted heritage': Challenges and possibilities

Constadina Charalambous (European University Cyprus, Cyprus)

Session 9 | 4th July, 16:00-17:00 (09:00-10:00 @ London)

Towards a critical cultural political economy account of the globalised higher education

Tingting Yuan (University of Nottingham, UK)

Session 10 | 8th July, 15:00-16:00 (9:00-10:00 @ Mannheim)

Bilingualism, emotion, and the foreign language effect on children

Agnieszka Ewa Krautz (University of Mannheim, Germany)

Session 11 | 8th July, 16:15-17:15 (9:15-10:15 @ London)

Has COVID impacted student's engagement with science? An international comparison between UK and China

Catherine Ye Cao (King's College London, UK)

Session 12 | 11th July, 16:00-17:00 (9:00-10:00 @ London)

Mathematical development in children with neurodevelopmental disorders

Jo van Herwegen (UCL, UK)

Session 1

How can we promote dialogic interactions in primary school classrooms?

Dr. Serkan Uçan

Assistant Professor in Curriculum & Instruction

Department of Educational Sciences, Istanbul Medeniyet University, Türkiye

Time: 27th June, 13:50-14:50 (8:50-9:50 @ Istanbul)

ZOOM Conference ID: 883 022 61365 (password: 225864)

<https://us02web.zoom.us/j/88302261365>

Synopsis: The importance of the quality of classroom dialogue for students' academic achievement is well recognised internationally. Recent research shows that the use of productive forms of dialogic interactions can support both cognitive and socio-emotional aspects of student learning. Yet, this research also indicates that productive forms of dialogue are not widely observed in most classrooms, pointing out the importance of improving and enhancing the quality of classroom dialogue. In this seminar, after providing an overview of dialogic classroom pedagogy, I will talk about an ongoing curriculum intervention study that aims to promote dialogic interactions among students and between students and teachers.

About the speaker



Dr. Serkan Uçan is an Assistant Professor at the Department of Educational Sciences at Istanbul Medeniyet University, Turkey. He received his PhD in 2013 at the Department of Education and Professional Studies of King's College London in the UK. His research interests include the regulation of learning theory, computer-supported collaborative learning, virtual professional learning networks and dialogic classroom pedagogy. He currently teaches educational science courses for pre-service teachers and acts as the head of the distance education research centre at Istanbul Medeniyet University.

Session 2

Teaching and learning about climate change, environment and health

Prof. Justin Dillon

Professor in Science and Environmental Education
Graduate School of Education, University of Exeter (until August, 2022)
Institute of Education, University College of London (from September, 2022)

Time: 27th June, 16:00-17:00 (9:00-10:00 @ London)

ZOOM Conference ID: 883 022 61365 (password: 225864)

<https://us02web.zoom.us/j/88302261365>

Synopsis: There has never been a more urgent need to teach about climate change and the environment. Traditionally, environmental education and health education have existed in parallel. However, the links between our environment and our health and wellbeing have become clearer since the advent of COVID-19. In this talk, I will look at the research into effective climate change education and the research linking experience outside the classroom to health outcomes. Finally, I will attempt to draw the research evidence together to provide a vision of what might be done in schools and classrooms in the future.

About the speaker



Dr. Justin Dillon is a Professor in science and environmental education at the Graduate School of Education, University of Exeter. He joined Exeter in January 2018 after spending three years at the University of Bristol as Head of the Graduate School of Education. Justin was elected President of the European Science Education Research Association from 2007-2011 and he co-edits the *International Journal of Science Education*. He is a trustee of the Council for Learning Outside the Classroom and was Chair of the London Wildlife Trust for many years. Justin has co-edited a number of books including the *International Handbook of Research on Environmental Education*. He was given 'The Outstanding Contributions to Research in Environmental Education Award' by the North American Association for Environmental Education in 2013. Justin was appointed Editor-in-Chief of prestigious science education journal---*Studies in Science Education* in January 2018.

Session 3

Plant blindness and children's recognition of plants as living things

Dr. Alexandros Amprazis

Researcher in Biological Education

Department of Early Childhood Education, University of Western Macedonia

Time: 28th June, 15:20-16:20 (10:20-11:20 @ Athens)

Zoom Conference ID: 882 466 85732 (password: 639364)

<https://us02web.zoom.us/j/88246685732>

Synopsis: Children's conceptions of plants as living things are thoroughly analysed during the last decades. Additionally, many researchers showed interest in 'Plant Blindness', the people's tendency to ignore plants and underestimate them compared to animals. The aim of this research is to validate plant blindness' intensity among Greek primary school students and clarify whether this phenomenon can be linked to the young students' recorded difficulty to recognise plants as living things. One thousand forty-eight primary students from both rural and urban areas of north Greece participated in our study. The instrument of our research was a questionnaire that mainly examined attitudes towards flora and students' consideration of plants as living things. According to the results, Greek students do find fauna more interesting than flora and plants are not being spontaneously recalled as living things. A relationship between students' preference in flora and their perception of plants as living things was found, along with several other significant correlations to variables such as gender, age and participation in environmental education projects. The findings of our study enhance the general concern about the reduced interest in plant life as this is determined in the context of the plant blindness hypothesis.

About the speaker



Dr. Alexandros Amprazis is a researcher at the Department of Early Childhood Education, University of Western Macedonia in Florina, Greece. His research interests focus on plant biology education, on the plant blindness phenomenon and on theory and practice of Environmental Education/Education for Sustainability. He has published papers regarding plant blindness in international journals, as well as in proceedings of Greek and international conferences.

Session 4

The potential of Forest School practice in England to support gender equity

Shirin Hine

PhD Candidate in Education Research
School of Education, Communication and Society, King's College London

Time: 28th June, 16:30-17:30 (9:30-10:30 @ London)

Zoom Conference ID: 882 466 85732 (password: 639364)

<https://us02web.zoom.us/j/88246685732>

Synopsis: Recent research has highlighted the inadequacy of mainstream Environmental Education (EE) in preparing young people to address current environmental and social crises. 'Alternative' EE approaches, less constrained by dominant educational norms and ideologies, may therefore be key to addressing deficiencies in mainstream EE. One such approach is Forest School: an outdoor and environmental learning process centred around learners' holistic development, inclusive and reflexive practice, and the development of a lifelong relationship with the natural world. Forest School is widely practised in schools and other educational settings across England, yet offers learners an 'alternative' space in which prevailing norms and hierarchies may be disrupted. Existing research supports Forest School's potential to facilitate more socially and environmentally equitable interaction by providing learners with different ways of engaging with each other and the world around them. However, further work is needed to examine how contemporary Forest School practice may help or hinder this potential. Using an ecofeminist perspective to highlight the inextricability of environmental and social justice, my research focuses on Forest School's ability to support gender equity as an indicator of its wider potential as a radical EE approach that may equip young people with the knowledge, skills and values required to address current crises. In this presentation I will outline how I have begun to explore this issue and will share preliminary findings concerning how the perceptions of FS practitioners may reproduce and/or challenge dominant norms surrounding gender. More broadly, I will discuss the significance of gender to EE, its history within this field, and why the longstanding marginalisation of gender issues in EE research and practice must urgently be addressed.

About the speaker



Shirin joined King's in 2017 for a part-time MA in Child Studies, which she completed in 2019. Shirin's MA dissertation, which explored children's constructions of gender in forest school, combined her interests in children's rights and gender equality with experience gained as a forest school volunteer with primary-aged children. In 2019, Shirin was awarded the Rosalind Driver Research Scholarship and is now pursuing a PhD in Science Education. Shirin's research aims to explore contemporary forest school practice in England to understand its potential contribution toward more socially just, gender-equitable forms of environmental education and how such practices might be better integrated into mainstream state education.

Session 5

Nature-based wellbeing interventions: Simple, yet powerful

Dr. Holli-Anne Passmore

Assistant Professor in Positive Psychology
Department of Psychology, Concordia University of Edmonton

Time: 1st July, 10:00-11:30 (30th June, 20:00-21:30 @ Edmonton)

Zoom Conference ID: 880 749 77843 (password: 160906)

<https://us02web.zoom.us/j/88074977843>

Synopsis: The belief that connecting with the natural world is beneficial to our well-being has surfaced repeatedly throughout human history and across diverse cultures. Empirical evidence is consistent, strong, and clear: engaging with nature boosts well-being. Happiness, satisfaction with life, meaning in life, vitality, connectedness, and elevation are all positively linked to nature engagement. Based on a wealth of evidence, researchers have made a case for relating to nature as a basic human psychological need in its own right. In this talk, a broad overview of the research in this area will be presented, with a particular emphasis on recent applied research examining nature-based well-being interventions. A general overview of theories will also be presented which ground research in this area and help to explain why engaging with nature is beneficial to our wellbeing. The construct of nature connectedness will be discussed, as will the problematic issue of conflating nature connectedness with time in nature. Questions and discussion are encouraged!

About the speaker



Dr. Holli-Anne Passmore is an Assistant Professor of Psychology at Concordia University of Edmonton in Alberta, Canada. Additionally, Holli-Anne is the Director of the Nature—Meaning in Life (NMIL) Research Lab, an Editor of the International Journal of Wellbeing, Science Chair of the Spirituality and Meaning Division of the International Positive Psychology Association, and an invited academic with the Global Wellbeing Initiative (a partnership between the Gallup World Poll and the Wellbeing for Planet Earth Foundation). She is a co-developer of a free online course on Nature Connectedness out of the University of Derby, UK, and has developed (and teaches) a capstone course entitled “Nature and Wellbeing”. Holli-Anne collaborates with colleagues from around the globe on a number of well-being-based research endeavours. The primary focus of her work is the development and validation of practical interventions to enhance well-being through noticing and engaging with everyday nature close to home. She is also studying the emerging issue of eco-anxiety. Holli-Anne’s academic research articles and book chapters have been published in numerous peer-reviewed journals and publications and featured in various media and podcasts.

Session 6

Understanding young children's perspectives on and experiences of COVID-19 in China and England

Dr. Jie Gao

Research Fellow in Early Childhood Education and Care
Institute of Education, University of College London

Dr. Yuwei Xu

Assistant Professor in Education and Teacher Development
School of Education, University of Nottingham

Time: 1st July, 15:00-16:00 (8:00-9:00 @ London)

Zoom Conference ID: 880 749 77843 (password: 160906)

<https://us02web.zoom.us/j/88074977843>

Synopsis: Taking a comparative approach, this paper explores how child agency is embedded and shaped in different sociocultural discourses in China and the UK - where there are different policies, situations, and public responses to the outbreak. We adopted an innovative methodological approach to access young children in the two countries and engage their parents as co-researchers (Hackett, 2017). Participatory visual methods (Clark, 2010) were used, including children's drawings and/or photo-taking facilitated by parents. Parents were also interviewed to contextualise children's perspectives and experiences. Our paper provides understanding of the immediate impact of public health emergencies on children's life from their own voices.

About the speakers



Dr. Jie Gao is a Research Fellow at Centre for Teacher and Early Years Education, UCL Institute of Education. She obtained PhD in Psychology of Education from University of Cambridge. Her research interests include motivation theories, parenting, children's voice, agency, play, well-being and teacher professional development. She has published articles in a number of academic journals, including *Early Years*, *Frontiers in Psychology*, *International Journal of Science and Mathematics Education*, *BMC Health Service Research*, *BMC Psychology* and *Brain Stimulation*.



Dr. Yuwei Xu is an Assistant Professor at the University of Nottingham. With a PhD in gender and early childhood studies gained from the University of Glasgow, Dr Xu's research interests include gender and men's participation in early childhood education and care, child agency, 0-3 curriculum, child-centred pedagogy, parenting and family relationships, play-based pedagogy, teacher professional development, and women in STEM. Dr Xu is an editor for *Children & Society* journal, an associate editor for *Teachers and Teaching: Theory and Practice*, and an editorial board member for *British Educational Research Journal*.

Session 7

Me, my child and Covid-19: parents' reflections on their child's experiences of lockdown in the UK and China

Dr. Kate Hoskins

Reader in Education

Department of Education, Brunel University London

Time: 1st July, 16:00-17:30 (9:00-10:30 @ London)

Zoom Conference ID: 880 749 77843 (password: 160906)

<https://us02web.zoom.us/j/88074977843>

Synopsis: Over the past two years, the world has been living through the unprecedented Covid-19 pandemic. Children have had to adapt to online classrooms and lessons of some sort, and many parents have been forced to work from home, whilst supervising their child's home learning activities. To understand how children and their parents have coped during this time, we used participatory visual methods, engaging parents as coresearchers to ask their child to photograph and/or draw pictures that represent their daily lived experiences over the lockdown period. We then asked parents to interview their children (24 in total, 13 in the UK and 11 in China) using children's artwork as prompts and finally we interviewed parents. Through the data collection process, parents captured their children's experiences and feelings since the coronavirus struck. By participating in the study, parents were provided with an opportunity to check in with their child to understand how they were coping with the lockdowns and ongoing periods of home learning. The data provides unique and comparative insights into children's experiences in the UK and China during this exceptional time and is the first study to integrate parents' and children's' views of Covid-19, drawing on parents as coresearchers.

About the speaker



Dr. Kate Hoskins is a Reader in Education with a focus on policy at the Department of Education, Brunel University London. Kate received her doctoral degree from King's College London. Her research interests rest on the intersections between education and social policy, identity and inequalities in relation to early years, further and higher education. Her recent funded project with Professor Alice Bradbury examined the role of nursery schools in reducing the impact of socio-economic disadvantage in the early years sector. She has published on inequalities in ECEC, with a focus on the role of policy in exacerbating these.

Session 8

Translanguaging, social justice and ‘conflicted heritage’: Challenges and possibilities

Dr. Constadina Charalambous

Assistant Professor in Language Education and Literacy
Department of Education, European University Cyprus

Time: 4th July, 14:00-15:00 (09:00-10:00 @ Nicosia)

Zoom Conference ID: 875 745 92440 (password: 945542)

<https://us02web.zoom.us/j/87574592440>

Synopsis: Socially just pedagogies are usually understood as the educators’ efforts to enact pedagogical practices that improve the learning and life opportunities of typically underserved students, while equipping and empowering all students to work for a more socially just society themselves. Translanguaging pedagogies have been discussed as a way of promoting social justice in the classroom by offering ‘communicative and educational possibilities to all’, promoting linguistic equality and ‘giving voice’ to marginalised migrant students. This talk will focus on the challenges posed by the increasing (in)securitization processes and practices that “enact our world as if it is a dangerous world, a world saturated by insecurities”. We will present an example from a highly diverse Greek-Cypriot primary school classroom, following an attempt to implement translanguaging pedagogies. What makes this case rather particular, is that one of the classroom languages is Turkish, a language that has been stigmatized by a history of conflict both in the Greek-Cypriot context and in many of the children’s own communities and historical trajectories (e.g. Pontian context and Bulgarian context). Drawing on linguistic ethnographic data (classroom observations and recordings), this study examines how language ideologies and discourses of (in)security and conflict may pose significant obstacles for translanguaging practices and pedagogies.

About the speaker



Dr. Constadina Charalambous is an Assistant Professor at the Department of Education, European University Cyprus in Nicosia. She earned her doctoral degree from King’s College London. Her main research interests revolve around language education, literacy and multilingualism, in relation to larger cultural and socio-political ideologies and especially in relation to peace, conflict and processes of (in)security. She has received funding from British Academy, Fulbright, European Union & Cyprus Research Promotion Foundation and her work is published in international journals. She is the co-author of the book entitled *Peace Education in a Conflict-Affected Society: An Ethnographic Journey* published by Cambridge University Press.

Affected Society: An Ethnographic Journey published by Cambridge University Press.

Session 9

Towards a critical cultural political economy account of the globalised higher education

Dr. Tingting Yuan

Assistant Professor in International Education
School of Education, University of Nottingham

Time: 4th July, 16:00-17:00 (09:00-10:00 @ London)

Zoom Conference ID: 875 745 92440 (password: 945542)

<https://us02web.zoom.us/j/87574592440>

Synopsis: This study provides a reflection upon the existing norms, forms and politics of knowledge transformation in higher education in the global context. It is based on an empirical study that seeks what Chinese scholarships may distinctively bring to the future professions in the global South. The qualitative empirical data reported in this study are based on the voices of 39 university students from 26 developing countries, studying in 5 cities in China. The findings revealed an increasingly globalised HE teaching and learning approach and the persistent struggles such as language of instruction. When considering broader context, the 'Chinese degrees' demonstrated a higher level of satisfaction from post-graduate students and showed strong pragmatism which was seen particularly beneficial to students' future employability. Therefore by analysing findings from a critical cultural political economy of education (CCPEE) approach the study looks at practice of education to politics of education, and rethinks the role of China in the global political economy.

About the speaker



Dr. Tingting Yuan is an Assistant Professor at School of Education, University of Nottingham. Her broader research interests include globalisation, public goods and education, international aid of education, China-Africa educational cooperation, British doctoral training policy and other educational issues particularly in higher education within the complexities of global political economy. I have presented papers on 'donor logic' and the political economy of Chinese educational aid at a number of international conferences in Europe, the

USA and Asia, such as the World Congress of Comparative Education held by the World Council of Comparative Education Societies, the annual conference by the American Comparative and International Education Society and the UK Forum for International Education and Training (UKFIET) on Education and Development.

Session 10

Bilingualism, emotion, and the foreign language effect

Dr. Agnieszka Ewa Krautz

Assistant Professor in Psycholinguistics
University of Mannheim

Time: 8th July, 15:00-16:00 (9:00-10:00 @ Mannheim)

Zoom Conference ID: 892 697 20125 (password: 926525)

<https://us02web.zoom.us/j/89269720125>

Synopsis: Does using a second language influence moral choice? While several studies have demonstrated the moral foreign language effect (MFLE), others have failed to find any evidence for it. Recently, researchers have been exploring linguistic and psychological factors contributing to the effect. In this talk, we will address the nature of the MFLE and the factors affecting it. We will also question the typically used classical moral dilemmas, which necessitate hypothetical choices and present a recent study, which requested participants to make decisions on everyday moral dilemmas, eliciting either an egoistic or altruistic choice.

About the speaker



Dr. Agnieszka Ewa Krautz is an Assistant Professor at the Department of English Linguistics, University of Mannheim, Mannheim, Germany. She received her MA degree in Ethnolinguistics from A. Mickiewicz University in Poland and an MPhil degree in Psychology and Education from the University of Cambridge, England. She completed her doctoral studies with a PhD in Psycholinguistics at King's College, London in 2013 and finished her post-doctoral qualification in English Linguistics at the University of Mannheim. Since 2014, she has worked as an Academic Staff Member at the University of Mannheim, following a part-time appointment at the Heidelberg University. Her research interest include: bilingual and multilingual language processing and representation, second language acquisition, the impact of language on cognition, aspects of human psychology that interact with linguistic processing including emotionality, decision making, and perception of self. Her current projects relate to investigation of the multilingual emotionality, lexical creativity, and establishing an open-source picture naming database.

Session 11

Has COVID impacted student's engagement with science? An international comparison between UK and China

Ye Cao

PhD Candidate in Education Research
School of Education, Communication and Society, King's College London

Time: 8th July, 16:15-17:15 (9:15-10:15 @ London)

Zoom Conference ID: 892 697 20125 (password: 926525)

<https://us02web.zoom.us/j/89269720125>

Synopsis: In this workshop, Ye will share some preliminary findings from her PhD thesis, which investigates Chinese student's science engagement in the context of the global pandemic. As a global topic closely related to medical and scientific issues, it seems reasonable to assume the pandemic impacted students' engagement and aspirations to science in some way. For example, UK research found that young people are now more interested in a scientific career as a result of COVID 19. Similarly, and given that China is the first country reported the pandemic, it seems likely that Chinese students' science-related engagement and perceptions will have also been impacted. Thus, science capital arguably has potential as a useful tool to understand how Chinese student's engagement and aspirations changed before and after the global pandemic. The presentation is based on analysis of data from two large scale surveys conducted in UK and China during the pandemic. This international comparison can help us understand how this global pandemic impacting young people's attitude towards science, as well as their aspirations to work in science. A sociological perspective will be highlighted in the gender difference and urban-rural divide in the discussion.



About the speaker

Ye Cao is a PhD candidate in Education Research at King's College London. Her research interests are in engagement issues in science education and international comparative education. Her perspective research focuses on applying the lens of science capital to understand student engagement in China. She also worked as a Research Assistant on the research project Sustaining teacher quality and retention post-pandemic. She also teaches two modules for BA Social Science programme at King's College London. Before joining King's, she obtained a Master of Engineering degree from Boston University.

Session 12

Mathematical development in children with neurodevelopmental disorders

Dr. Jo van Herwegen

Associate Professor in Developmental Psychology
Institute of Education, University College London

Time: 11th July, 16:00-17:00 (9:00-10:00 @ London)

Zoom Conference ID: 881 192 00392 (password: 751293)

<https://us02web.zoom.us/j/88119200392>

Synopsis: Studies in Down syndrome (DS) and Williams syndrome (WS) have suggested that mathematical abilities are impaired. However, it is unclear which domain-general or domain-specific abilities impact on mathematical development in these developmental disorders. The current study examined the foundations of mathematical development across participants with WS (n = 24) and DS (n = 26) compared to typically developing (TD) children (n = 26) in relation to domain-general (i.e., general intelligence and visuospatial abilities) and domain-specific abilities (non-symbolic and symbolic number abilities). Developmental trajectories showed that mathematical abilities were delayed in line with overall mental age in DS and WS. Whilst visuospatial abilities predicted performance for DS and TD participants, this was not the case for the WS group, instead Approximate Number Sense abilities predicted mathematical development. These findings suggest that those with DS and WS may benefit from different mathematical intervention programmes.

About the speaker



Dr. Jo van Herwegen is an Associate Professor at Institute of Education, UCL. She earned her PhD from King's College London. Jo's research focuses on improving educational outcomes and wellbeing for typically developing children and those with Special Educational Needs using evidence from cognitive and developmental psychology as well as neuroscience. Her ultimate goal is to obtain a better understanding of the complexity of development, especially the impact of environmental factors such as educational practice, education policies, and home environment, on number and language development through the study of cross-syndrome comparisons (for example Autism, Down syndrome, Mathematical learning difficulties, Williams syndrome) and individual differences. She uses a range of methodologies, including eye-tracking studies, developmental trajectories and longitudinal studies as well as interventions programmes in order to obtain a better understanding of the complexity of development.