



University of
East London

Year of
Science



SHAPING THE FUTURE

Since its founding in 1898, the University of East London has been committed to shaping the lives of the communities we serve for the better. With a strong and proud history of providing our communities with access to education, skills, training, and innovation improving the lives and outcomes of young people has been at the heart of our institution and the core of our mission.

Today, the University of East London (UEL) is one of the most socially inclusive and diverse universities in the UK, with a vast global student body, representing over 160 nationalities.

Vision 2028, our ground-breaking 10-year strategy to become the UK's leading careers-intensive university, strives to develop a diverse talent pipeline, and help organisations innovate and grow sustainably. At the heart of this strategy is a mission to tackle inequalities, achieving social justice and equity, aligned with the United Nations' Sustainable Development Goals. We are committed to building a healthier, fairer, greener world.

Our pioneering work in emotional and social development from birth to graduation and beyond serves as a roadmap towards a healthier, fairer, greener and more nurturing society, reflecting our commitment to improve the lives of young people. With a long history of early years research, we aim to ensure that, regardless of background, children are supported and equipped to flourish and thrive into adulthood. Our research in early years development aims to understand, engage, support, and co-create interventions with children and families within some of the most diverse and vulnerable environments in the UK.

UEL is one of the largest Early Childhood degree providers in London - we currently train 1 in 20 teachers and 1 in every 4 childhood and youth studies students in the capital. As we train future professionals, it is vital that our educational environment and teaching practice pioneers advancements in the emotional and social outcomes of our students and graduates. This is best demonstrated by our award-winning Mental Wealth and Professional Fitness curriculum, which goes beyond the usual degree subject content, extending to emotional and social development, physical and cultural intelligence and digital skills that are essential as we move towards a 5.0 economy and beyond.

Our research-led interventions have provided technical support to governments, developed sustainable materials and environments, created innovative tools to empower disadvantaged groups, and informed policy making. For example, UEL's Institute for Connected Communities and the Online Harms and Cybercrime Unit advises policy makers on creating a safer online environment for children.

As we seek to achieve the ambitious goals of Vision 2028 and contribute to global advancement of the UN's Sustainable Development Goals, UEL will continue to prioritise emotional and social development to ensure that every member of the communities we serve is able to flourish and thrive throughout their life and career.



UEL trains **1 in 20** teachers and **1 in 4** early years professionals in London.



UEL works directly with over **40** schools and nurseries through the Newham Learning network and is host to the largest early years practitioner network in the UK.



Professor Amanda J. Broderick
BA (Hons) PhD DipM DipMRS PGCTL
FRSA MBGS FCIM PFHEA
Vice-Chancellor & President

The picture of health inequality in Britain is a stark one.

Distressingly, the number of children living in poverty continues to rise: 4.2 million - or 29% of children – in 2023, a 17% increase since 2010. No child should go to bed hungry, and the damaging effects of growing up in poverty can be lifelong. It is statistics like this that make the work undertaken by the University of East London in the Early Years field so vital.

It is work rooted in the University's location, in some of the most socio-economically impoverished, yet most multi-cultural, boroughs in the country. The healthcare and education sectors need skilled staff if they are to fight inequity and improve lives; as a former health minister and nurse, I know the importance of a well-trained workforce in this battle.

The University's impact in tackling inequalities is a powerful combination of experiential place-based teaching and learning, and through its research. An example is the pioneering research led by the Baby Development Lab, to understand how society can better support our youngest and most vulnerable in their most formative years. Those findings are being directly applied by UEL's early years students and graduates, working in local schools and nurseries.

UEL's partnership work in both health and early childhood are examples of how UEL is reimagining the role of higher education. At times we hear people question the value of going to university. I would urge those people to look at how institutions like UEL are doing ground-breaking work to train the future health and teaching workforce to both

reflect and respond to our rapidly changing society. UEL is showing how we need to take a much broader, holistic view, and harness the collective insights and commitment of the many stakeholders who want to improve outcomes for our most marginalised. Genuine and sustainable collaboration will drive the radical solutions needed to shift the dial on complex issues, and I urge UEL to continue its drive to shape a healthier and more equitable future.



Ann Keen

RN NDN FRCN FQNI FAAN

MP for Brentford and Isleworth (1997-2010)

Parliamentary Under Secretary of State for Health Services (2007-2010)



UEL'S UNIQUE INTERDISCIPLINARY & APPLIED APPROACH TO EARLY YEARS AND YOUTH

The University of East London has a strong tradition in supporting children and families through research and education in a range of related disciplines including early childhood education and care, developmental psychology, neuropsychology, counselling, community work, global development, law, health promotion, and social work.

We have brought this wealth of experience and disciplines together in 2024 to launch the East London Centre for Early Years and Youth. The Centre takes an inter-disciplinary approach, working closely with wider faculties whilst combining and building upon the schools of Psychology and EduComm as the newly created School of Childhood and Social Care. The School incorporates two world-leading research centres in the early years space: UEL's Baby Development Lab, which plays an internationally leading role in early years research; and the International Centre for the Study of the Mixed Economies of Childcare, whose work supports and advises governments in the UK and abroad on reforming childcare funding and workforce policy, and on social and emotional wellbeing. These developments reflect the increasing importance of our research in the early years field, as scientists and social researchers begin to fully appreciate just how vital our first 1000 days of life are to future success and wellbeing.

UEL has a 126-year history of training and supporting teachers in east London and beyond.

Newham, UEL's home borough, has some of the highest levels of economic deprivation and health inequalities in Europe, and its children experience one of the highest rates of disruption to early-life emotional and social development anywhere in the country, with severe consequences for mental health in childhood and beyond. Over the past two decades, our research has explored how we can improve the lives, mental health, educational and wellbeing outcomes for some of our most vulnerable young people. For example, the rates of special educational needs and disability amongst children in our catchment area are some of the highest nationally. UEL's award-winning RIX research centre focuses on improving the lives of children and adults with learning disabilities.

By harnessing the power of partnership, UEL's researchers are supporting global, long-term, and intergenerational change. UEL is working to extend the international impact of its early years research through a partnership with the Governor of Western Australia and the Telethon Kids Institute, facilitated by the Royal Foundation, whose focus on making a positive difference in early years aligns closely with the University's multi-disciplinary and innovative approach to rethinking early childhood as the foundation of a healthier and fairer society. UEL also leads a European-wide consortium (the European Cooperation in Science & Technology Network) in the measurement of how early

home and educational environments influence development across 20 different countries. A global focus also informs work done in collaboration with the Home Office evaluating cross-cultural differences in early autism diagnosis.



Case Study

PEER ACTION COLLECTIVE

The Peer Action Collective (PAC) is a £5.2million programme which aims to give young people the chance to make their communities safer, fairer places to live. It is co-led by researchers from UEL's Institute for Connected Communities and is jointly funded by the Youth Endowment Fund, the #iwill Fund and the Co-op Group.

The Peer Action Collective supported young people aged 10-25 to conduct research and social action related to youth violence. The project had a diverse network of participants with 20-40% of young people identifying as being from the global ethnic majority and more than 10% of young researchers living with a disability. Additionally, over 75% of the projects took place in some of the most deprived parts of England and Wales.

The project has so far had significant success, with more than 80% of young people involved in the project gaining an increased understanding and over 90% of them reported a commitment to ongoing involvement in social action.

The programme is now on its second round, focusing on youth violence research.





As part of the annual Sport In Your Futures Summer Festival, more than **400** pupils are able to try a range of exciting new sports such as laser tag, skateboarding and breaking.



Over **2,000** primary aged children from a network of **20** local schools have taken part in the Sport In Your Futures programme since it began.

Case Study

SPORT IN YOUR FUTURES

The first of its kind in the UK, this programme aims to directly tackle health and social inequality in east London through increasing exposure and access to high-quality sport facilities and experiences at the University.

Taking a ground-breaking approach to university community outreach, the programme offers under-served early years and primary school children in Newham, Tower Hamlets and Hackney, the chance to take part in sporting activities on campus, watch British Universities and Colleges Sports matches, meet sporting scholars and hear from specialist UEL staff on the benefits of sport to health and wellbeing.



Case Study

SOCIAL PRESCRIBING IN CHILDREN AND YOUNG PEOPLE

Social prescribing empowers young people to improve their mental health and wellbeing through attending community activities and services, as opposed to medical interventions. Over several years, UEL's Institute for Connected Communities (ICC) has led work evaluating the success of social prescribing and researching best practice in London, nationally and internationally.

UEL researchers evaluate surveys from young social prescribing users at the beginning and end of their social prescribing programmes, as well as providing a cost-benefit analysis of the programme and analysis of Case Study healthcare service. Subsequently, our researchers

can make recommendations to improve and refine the programme for the benefit of the users including the Department of Health & Social Care (DHSC) in England as well as health services around the world.

For example, the ICC conducted a DHSC-funded outcome, process and economic evaluation of the Social Prescribing for Young People Pilot nationally, focusing on three areas within the UK - Sheffield, Luton and Brighton & Hove - between September 2018 and September 2020. This led to a further project, funded by the National Institute for Health Research, called CHOICES which examined how social prescribing for children and young people may fit into the wider landscape of young people support services. More recently, the ICC has led the evaluation of a European Commission-funded project called COPE which adopted social prescribing to support several hundred young people in NEET (not in education, employment or training) circumstances.

Our researchers have consistently found statistically significant improvements in mental wellbeing of young people resulting from attending social prescribing programmes. Subsequently, our work has helped to identify that social prescribing can support the mental health of young people while they are waiting to access formal mental health services. Additionally, as waiting lists for NHS services continue to rise, our work in evaluating the effectiveness of these programmes has helped stretched services.

THE BABY DEVELOPMENT LAB

UEL's Baby Development Lab plays an internationally leading role in early years research, pioneering state-of-the-art wearables and naturalistic brain recording techniques to study how the diverse early living environments and relationships experienced by babies and children in our catchment area influence early stress – both in the child themselves, and their parents/ caregivers – and to investigate how adversity influences the way parents interact with their children.

Research findings from UEL's Baby Dev Lab have reached over 50,000 early years practitioners in 2000 primary schools, leading to substantial changes in early years teaching environments to support learning and development.

Since 2019, the Lab has received £3.2 million in external funding, from funders including the European Research Council, Economic and Social Research Council, and the Medical Research Council. This research is being used in the public and private sectors to improve children's wellbeing, including by the Department for Education, Public Health England, Thomas Cook and Center Parcs.

Our wider interdisciplinary research also uniquely focuses on the different home environments (real-world and digital) that children from socio-economically diverse and deprived backgrounds experience, and how they can be optimised to protect vulnerable children.





Left: His Majesty King Charles III speaks with researchers and families at UEL's Baby Dev Lab on his visit to the University, the first of his reign.

Case Study

CITY LIVING: THE IMPACT OF URBAN ENVIRONMENTS ON EARLY CHILDHOOD DEVELOPMENT

Baby Development Lab-led research has found that by the age of one, children growing up in noisier home environments have higher levels of physiological stress, affecting both their cognitive performance and their emotional responsiveness. The research included both babies and parents participating in lab-based studies where readings were taken from physiological stress monitors. Children growing up in urban environments showed lower sustained attention and greater emotional instability – although they also showed faster learning speeds in some contexts.



Since 2019, the Baby Dev Lab has received **£3.2 million** in external funding.



The Baby Dev Lab's research findings have been presented to over **50,000** early year practitioners.

A major focus of the Lab's work is on how to help adapt teaching styles to play to the strengths of high stress, inner city children. Additionally, UEL has secured a Medical Research Council grant to lead work to further understanding about ADHD, a disorder that disproportionately affects children from lower socio-economic backgrounds, but about which there has been little research to date. The Lab's specialisms will allow researchers to investigate how early home environments affect ADHD development.

A further project examines how outdoor learning in natural settings affects young children from urban backgrounds – concentrating in particular on children from underprivileged socio-economic backgrounds. With almost 70% of the world's children expected to grow up in cities by 2050, UEL research has proven links between increased access to outdoor learning and improved cognition, behaviour, and school performance in young children.

The team are committed to finding new, evidence-based ways to improve the lives of local children and families and using that knowledge to roll out life-changing impact across the UK and beyond.





Case Study

THE SCIENCE OF A SMILE

This pioneering work is developing new techniques to measure for the first time, brain activity and physiology concurrently in an interacting parent/carer and child. These brand-new techniques make it possible to explore and better understand how smiles and shared emotions open up parent-child communication and trigger brain synchrony, meaning we can understand more about how being in the same state simultaneously enables feelings of shared understanding - e.g. finding it easier to see something from someone else's perspective - and the neural activity driving that in both babies and adults. Establishing mutual smiles and laughter is one of the most powerful ways of establishing good parent-child responsiveness and communication, which is what drives almost all early development. In short, smiles supercharge learning.

TRANSITIONING TO SCHOOL READINESS



Newham has the second highest rate of child poverty in the capital and the lowest life expectancy of all London boroughs. High-quality teacher training, including in early years, is therefore vital to providing young people in Newham with the best possible start in life and to their education journey.

As one of the largest providers of early childhood courses in London, UEL's academic team has extensive experience not just in teaching, but also family support and early intervention methodologies. Capitalising on the University's location, UEL has earned an excellent reputation for working in partnership with schools to prepare teachers to work in the most diverse classrooms in the country.

Our reputation has recently been further validated by Ofsted, with our primary and further education provision ranked as 'outstanding', and our secondary provision being ranked as 'good'.

“In Newham and around east London, UEL’s reputation is very strong. By reputation alone, it’s a good enough reason to work with UEL above anybody else. But the fact that it’s been in east London for 125 years, it knows east London better than any other university – that’s the unique selling point.”

David Bailey
Director, Newham Learning

Trainee teachers and UEL staff are embedded in local schools, multi-academy trusts and communities, and trainee teachers spend extensive time in classrooms on placement in local schools. This means that every day, hundreds of UEL trainee teachers are in classrooms across the city and region, improving their teaching practice and supporting young people in some of London's most deprived communities. UEL teacher training is informed by the latest research, including research into improving emotional resilience and wellbeing through positive education programmes, which led to changes in government education policy around the teaching of wellbeing and resilience in the UK and EU.

UEL works in partnership with London Early Years Foundation (LEYF), which runs UEL's on-campus nursery at Docklands - many of our students are parents, and the Children's Garden Nursery and Pre-School offers and provides care for their children, placements for Early Years students and is also a community nursery open to all, with its children and staff reflecting the rich diversity on UEL's doorstep.

UEL hosts the Newham Learning Conference, Head Teachers Conference, and the largest Early Years Practitioner Conference in the UK, as well as other school training events on campus.

By bringing practitioners together and fostering collaboration between schools and the academy, UEL is contributing to the growth and improvement of the educational landscape in its borough and beyond. These efforts are leading to better learning outcomes for students and building a more cohesive and effective education system overall.

Case Study

NEWHAM LEARNING



NEWHAM LEARNING

Newham Learning is a partnership of over 40 schools that work collectively to give every pupil the best start in life. It aims for all the borough's children and young people to have the best possible educational opportunities, outcomes, and life chances. UEL is involved across the partnership, including undertaking collaborative research into early childhood development, supporting the establishment of thematic learning communities, presenting at headteacher conferences, and taking an active role in the strategic vision for the partnership through representation on its Board.



PROTECTING AND SUPPORTING CHILDREN IN A DIGITAL AGE



As society progresses towards an increasingly digital future, it will be crucial to understand the challenges and opportunities that lie ahead. With expertise in computer science, AI, cybersecurity, data analytics, and digital innovation, UEL is at the forefront of research and education in this rapidly evolving field.

New technologies such as the metaverse offer huge potential benefits. But they also come with increased risks – particularly for children and young people. UEL's Institute for Connected Communities and the newly launched Online Harms and Cybercrime Unit explore a range of issues surrounding online harms and cybercrime. Its Director, Professor Julia Davidson OBE, is Chair of the UK Council for Internet Safety's Evidence Group, and provides expert advice to national and international governments. Professor Davidson has also directed a study for the UK Government exploring adult online hate, harassment and abuse, which highlighted patterns of abuse based on age, sexual orientation, race and religion. Most recently, she worked on a review for the NSPCC of evidence on the online risks and harms experienced by children in the UK. The review focuses primarily on evidence concerning children's exposure to online sexual risks, in line with the NSPCC's priority work around child sexual abuse, and outlines a series of recommendations for tech companies and Ofcom.

Case Study

STAYING SAFE IN AN ONLINE WORLD

UEL was part of a consortia of partners awarded €5 million Horizon 2020 funding to better understand drivers of cybercrime. UEL's research focused on developing prevention strategies to discourage young people from engaging in cybercrime activities. Their research found that two thirds of young people in Europe engaged in some kind of online risk taking that could lead to criminal activity.

Their research aimed to better understand the drivers behind this and to prevent initial exploration developing into more serious cybercriminal behaviour. As a result of the research, a new taxonomy of cybercrime has been created to inform governments, policy makers and law enforcement across the globe. A number of resources have also been created for young people and their families to raise awareness of what types of online behaviours are risky, harmful, or criminal. The materials have been disseminated throughout the EU to thousands of young people and parents on Safer Internet Day 2023 via the network of Safer Internet Centres.

The UEL Institute for Connected Communities is also part of a UKRI-funded collaboration working with partners from policy, practice and industry to understand the challenges that tech companies



using metaverse apps face while ensuring that as many children, including those with neurodivergent conditions, can use their platforms safely. The project identified knowledge gaps and resource needs of professionals and practitioners who work with children at risk of abuse and exploitation in the metaverse, and listened to the voices of children themselves to understand their needs for safety and support while using the metaverse. The Virtual Reality Risks Against Children research project aims to help industry and policy makers create a safer and more supportive environment for children online.

LOOKING TO THE FUTURE

UEL is breaking down barriers to work and education – it's at the core of the University's mission. This mission extends to all of our work, including research and training in education and Early Years, to ensure that everyone has a fair, healthy, and positive start in life.

Our philosophy is rooted in partnership, as we strive for progress as part of a wider educational ecosystem that supports the vision of raising standards for children and families, particularly in underprivileged areas.

As UEL celebrates its 2024 Year of Science, following on from its historic 125th anniversary in 2023, our work in the field of Early Years research and training reminds us to look to the future. How will children learn in the future? What should early years teaching and care look like to support our youngest and most vulnerable? What role will AI have? How can we ensure rapidly advancing technology is harnessed to improve outcomes and complement our uniquely human qualities and skills, to build a fairer, more sustainable world? These are some of the many questions it is incumbent on us to ask and work with our communities to find answers to, in our role as custodians of this institution, which will continue to transform lives long after current students, staff and stakeholders have left it.

In the meantime, every member of UEL's communities can be proud of the part that they are playing in having impact now, to give others the chance to flourish and thrive in the future.



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