



# Starting blocks — the crucial early years

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Since the turn of the century, compelling evidence has emerged on the importance of early childhood education to a child's long-term growth and potential – evidence that suggests intervention in the early years is more effective and more useful than that later on in life.

Research on understanding early development and learning draws upon the fields of developmental psychology, education, neurosciences and economic sciences. This inter-disciplinary approach that is directed at improving developmental and learning outcomes is a hallmark of the field of *Science of Learning*. Indeed, it is these inter-related strands of research which have facilitated the building up of a full and rounded picture of the importance of investing in the early years of development.

Neuro-scientists have shown that the brain develops most rapidly in the first three years of life and is highly responsive to and affected by

environmental stimulation. Programme

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evaluation research shows that participation in ECE promotes cognitive development and can narrow the achievement gap between children from low-income families

and their peers from more advantaged backgrounds. The possibilities of more far-reaching outcomes are shown by economic studies which indicate that the returns on government investment are higher when the education investment is incurred in early childhood as compared to adulthood.

Our findings have been informed by work conducted not only through different disciplinary lenses – educational, economical, neuro-scientific – but also by the meticulous collection of good and wide-reaching evidence garnered through both meta-analysis and empirical work. For example, our research team has recently completed a systematic review and meta-analysis on the effects of early childhood interventions on cognitive development in developing countries for the British government.

We have also just completed a project funded by UNICEF to develop a tool to measure early childhood development and learning, the East Asia Pacific-Early Childhood Development Scales. This project, which involved assessment of over 8,000 children from Cambodia, China, Mongolia, Papua New Guinea, Timor-Leste and Vanuatu, has resulted in unprecedented data on early development in the region. Now countries have an appropriate tool which can be used to evaluate programme efficacy and get the best evidence of what works and why. Indeed, the emphasis around the world has been towards evidence-based decision-making, and this research is very important from that aspect since it bears on policy.

But what is really innovative is the way the research is moving from evidence-based programming to focussing on implementation science. The latter should inform the adoption, replication and expansion of evidence-based programmes and is particularly needed in the Asian region. The next phase, currently underway, is to scrutinise the programmes that are really effective and understand why and how they work. It's not just a matter of saying this works but actually looking at the implementation. We need to focus on understanding how (in)effective programmes are implemented and on understanding the processes through which early childhood programmes affect child outcomes.