Early brain development
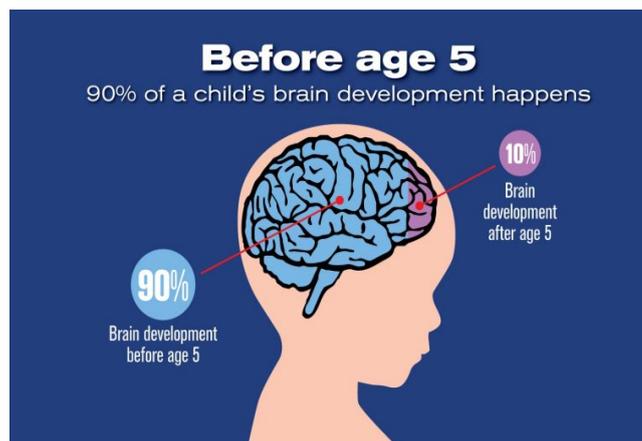
The Lifting Our Game - Report of the review to achieve educational excellence in Australian schools through early childhood interventions (2017) highlights quality early childhood education as one of the most effective ways all children can achieve positive life outcomes.

Research shows that most (90%) brain development occurs before a child turns five years – this is why quality early childhood education and care is so critical because it can:

- improve children's cognitive abilities
- improve social-emotional development
- make learning outcomes more equitable
- reduce poverty
- improve social mobility from generation to generation.

Access to nature and green spaces provides children with cognitive, emotional and physical benefits, including an increased ability to concentrate and reduced stress and aggression.

The First One Thousand Days – An Evidence Paper (2017) provides a summary of the significance of the first 1000 days as being the best opportunity to build strong foundations for optimal development.

A child's environment, experiences and relationships from conception to 2 years are particularly significant for brain development.

Humans develop as a result of the interaction between a variety of genetic, epigenetic, and environmental factors that means we are not predetermined by any single factor; but rather from a mix of what we inherit from our parents and the contexts in which our development takes place.

The graph below shows the sensitive periods of brain development across different areas. Note the importance of the early years in an individual's development – there's a lot happening in the first 5 years!

Source: Council for Early Childhood Development (2010)
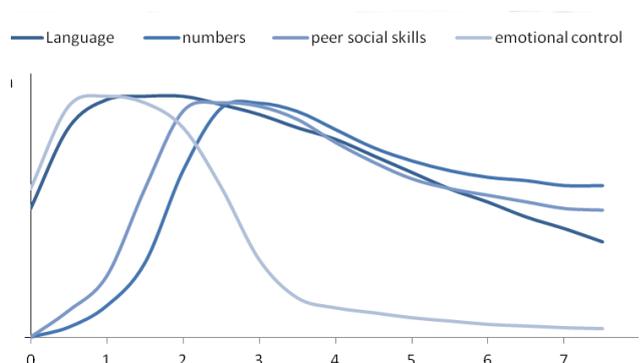
Useful links:

The Early Years Count – Queensland Government
Early Years Health and Development portal – Queensland Government
raisingchildren – The Australian Parenting website
Center on the Developing Child – Harvard University